MONITORING THE FIELD

October, 1972 | Issued by Field Engineering Johnson Service Co., Milwaukee, Wis. | Vol. 16, No. 10

NUCLEAR POWER PLANTS – SEISMIC CERTIFICATION

Recent branch office environmental control contracts for nuclear power plants have introduced Johnson branch personnel to a new specification requirement – **seismic certification** of instruments. This formidable sounding requirement necessitates the testing of control instruments to prove and document their ability to withstand certain seismic or earthquake forces.

Seismic or earthquake forces are specified in the contract bid documents. It is interesting to note that such specified seismic forces, generally given in terms of seismic accelerations, are determined by consulting engineers through a computer analysis of such factors as regional earthquake history, plant site geology, building design and construction, and equipment weights and locations.

Not all the equipment supplied by the branch office for a nuclear power plant job requires seismic certification. The contract bid package will indicate which instruments and/or systems are classified as "Seismic Class 1" requiring seismic certification. These are the instruments and systems whose failure due to earthquake might cause or increase the severity of a reactor coolant accident, result in an uncontrolled release of excessive amounts of radioactivity, or are vital to the safe shutdown of the reactor. Equipment supplied by the branches generally qualifies as Class 1 when it is part of an environmental control system in a Class 1 building.

How can the branches satisfy these seismic certification requirements and what will the cost be? These questions will be answered next month in **Monitoring The Field.**

* * *

Not all lessons are learned in the classroom! The hard truth of this fact was proven when the Application Engineers attending the five-week training school in Milwaukee challenged Field Engineering to a volleyball match. Although outnumbered, Field Engineering was victorious. (As a courtesy to the victims, no mention of the scores will be made.) The Field Engineering team as shown above included, front row, Gene Strehlow (left) and Bob Stahl. In the back row are Paul Wichman, (left), Dennis Totzke and Gary Buczak.

Training school team members were, from left to right in the front row, Paul Hadfield, Kansas City; Dale Ball, San Antonio; Charles Pock, Oklahoma City. In the middle row are Jean-Pierre Cilia, Kansas City; Jim Shearier, Indianapolis; Mike Scruggs, Wilmington, S.C. In the back row are Phil Pownall, Peoria; John Sheilds, Moline, and David Neely, Houston.

SECURITY SALES PERSONNEL: Any time you place an order with ADEMCO, be sure to show the Johnson account number (64712). With your next order, request a complete catalog and price list from ADEMCO (the first copy is free, each additional copy costs $1.00). It would also be to your advantage to obtain ADEMCO **Service and Troubleshooting Manual** #253 (cost is $5.00).

* * *

CLIP AND SAVE

In answer to numerous requests, we are repeating the list of main office contacts who can help you with specific application problems.

Air Compressors & Accessories	Gene Strehlow
All-Air Systems Double Duct & Variable Volume	John Kettler
BEIMS	Arn Quakkelaar
Branch Purchasing Directory	Dennis Totzke
Competitive Equipment	John Kettler Dennis Totzke
Construction	Arn Quakkelaar Clyde Frampton
Control Center Systems	Kevin Higgins
System Engineering; Contracts	Bill Mix
Training; Special Projects	Joel Richmond
JC/80	Lloyd Buck Dale Naborowski
T-6000, T-6700, JC/80	Mike Lynch Dave Podeszwa Jim Doweiko
T-6000, T-6500, JC/80	Gerry Gaffney
T-6500, JC/80	John Miller
Dampers & Damper Actuators	Dennis Totzke
Electric & Electronic Controls (Penn & Cybertronic)	John Halverson Jim Greevers
Electric Heat Control	John Halverson Jim Greevers
Filters	Gene Strehlow
Fluidic Instruments	John Kettler Bob Stahl
Heat Recovery Systems	John Kettler
Humidity	Gene Strehlow
IC^2 Applications	John Halverson Gene Strehlow
Tech. Promotional Assistance	Kurt Meerik
Industrial Controls	John Kettler Dennis Totzke
Inlet Vanes – Fans	Dennis Totzke
Multi-Zone – Single Zone and Rooftop Units	Bob Weeks
Nuclear Power Plants	Dennis Totzke
Pneumatic Instruments	Bob Stahl
P.P.C.S. (Project Planning & Control System)	Clyde Frampton
Security & Fire Alarm Systems	John Kaiser Bill McGinty
Refrigeration: Absorption, Reciprocating, Centrifugal	Gene Strehlow
Special Equipment	Bob Stahl
Training Schools	Paul Wichman Teckla Kubiak
Unitary Equipment: Unit Ventilators, Fan-Coil Units, Induction Units	Bob Weeks
Valves	Bob Weeks

PRINTED IN U.S.A.

LOYALTY AWARDS

Each year Loyalty Awards are presented to faithful Johnsonites who have completed 10, 20, 30, 40, 50, etc., years of service for the company. This issue of *Monitoring The Field* lists all branch office personnel who received awards in 1972. If anyone has been omitted from the Loyalty Award list, please let us know. We want to include everyone!

40 YEAR AWARD

Cy Kruger (Construction) ..... Detroit

30 YEAR AWARDS

Clarence D. Myers (Construction) ..... Columbus
Edgar H. Hope (Construction) ..... Washington, D.C.

20 YEAR AWARDS

Ronald Black (Branch Manager) ..... Akron
Edward Berry (Construction) ..... Albany, N.Y.
Robert Lindsey (Branch Manager) ..... Appleton
Martin Rowland (Service) ..... Baltimore
Charles Richardson, Jr. ..... Baton Rouge
James R. Gaylor (Service) ..... Birmingham
Eugene A. Paul (Construction) ..... Boston
Richard Bowler, Jr. ..... Boston
John Downey (Construction) ..... Boston
Gene McNally (Branch Manager) ..... Boston
Donald Stewart (Construction) ..... Buffalo
Wilbur Brannen (Construction) ..... Charlotte
Donald Schmidt ..... Chicago
Robert Myers ..... Cleveland
R. W. Brown (Service) ..... Denver
Jack Schofield (Construction) ..... Denver
Robert Pagliasotti (Service) ..... Denver
George Eckert (Regional Engineer) ..... (WRO) Denver
Robert J. Saulnier (Construction) ..... Detroit
Max Gober (Construction) ..... Fort Worth
John P. Calligan (Construction) ..... Greensboro
Clifford Smith (Construction) ..... Greensboro
Donald Loso ..... Greenville
Lloyd Zinn (Construction) ..... Harrisburg
Walter Gingrich ..... Harrisburg
Jack Crane (Construction) ..... Kansas City
L. W. Pickel (Construction) ..... Kansas City
William Boyle (Construction) ..... Kansas City
Gene Edwards (Branch Manager) ..... La Crosse
Finis McDonald (Construction) ..... Louisville
Darlene Olson ..... Minneapolis
Joseph Huber (Construction) ..... Minneapolis
Mike Gallagher (Construction) ..... Minneapolis
Jack Buffolano (Service) ..... New York
Bob Tisdale ..... New York
Al Perrone ..... New York
Robert G. Bishton (Construction) ..... Norfolk
Fred Darche (Construction) ..... Peoria
Emma Drysdale ..... Peoria
Clarence Mayer (Construction) ..... Philadelphia
John Wilkinson (Construction) ..... Richmond
Robert E. McDow (Construction) ..... Saginaw
George L. Butler (Construction) ..... St. Louis
Paul W. Jarnagin (Construction) ..... St. Louis
Ivan P. Johnson (Construction) ..... Salt Lake City
Charles King (Branch Manager) ..... Seattle
John Layman (Construction) ..... Toledo
G. J. Patanella (Service) ..... Union
Hubert Riggins (Construction) ..... Urbana
William B. Hope (Construction) ..... Washington, D.C.
James Stewart, Jr. (Construction) ..... Washington, D.C.
James V. Marter (Service) ..... Youngstown
Arthur P. Johnson (Office Manager) ..... Sydney, Australia

10 YEAR AWARDS

Raymond Forkel (Construction) ..... Albany, N.Y.
Dale Lemery (Construction) ..... Appleton
Arnold Petersen ..... Appleton
Jerry Hartleben (Construction) ..... Appleton
George T. Reed ..... Baton Rouge
William H. Collins (Construction) ..... Birmingham
Dalton M. Copeland (Construction) ..... Birmingham
Thomas J. Duke (Construction) ..... Birmingham
Opal Pleasant (Construction) ..... Birmingham
Henry T. Oyler (Construction) ..... Charleston
James Kegyes (Construction) ..... Cleveland
D. L. Whitman (Service) ..... Columbia
Duelon Waller (Construction) ..... Dallas
Ed Clarke (Service) ..... Dallas
Arthur Haberstroh ..... Dallas (Elec. Div.)
Charles F. Strawn ..... Dallas (Elec. Div.)
Donald E. Bowen ..... Dallas (Elec. Div.)
Odell H. Moore ..... Dallas (Elec. Div.)
James W. Moore ..... Dallas (Elec. Div.)
Neva Kirkpatrick ..... Dallas (Elec. Div.)
Helen L. Brown ..... Dallas (Elec. Div.)
Miles Bachand ..... (SWRO) Dallas
Carmen Bankston ..... Denver
Luther Cottrell (Construction) ..... Denver
Vincel J. Hayes (Service) ..... Denver
Edward G. Morris (Construction) ..... Denver
John R. Wold ..... Denver
J. A. Erickson ..... (WRO) Denver
Allan D. Palmer (Construction) ..... Detroit
Leonard J. White (Construction) ..... Detroit
Frank Houston (Construction) ..... Des Moines
Dick Teberg ..... Fargo
James Gwin (Construction) ..... Fort Worth
Eugene McGlothlin (Construction) ..... Fort Worth
Ludmila Schumaker ..... Grand Rapids
Norman B. Lilly ..... Grand Rapids
William Barnes, Jr. (Construction) ..... Grand Rapids
Warner Lee Chavis ..... Greensboro
R. Daniel Hawks ..... Greensboro
Randall R. Johnson (Construction) ..... Greensboro
Fred Leonard ..... Greensboro
Robert A. Miles (Construction) ..... Greensboro
Barbara Vickers ..... Greensboro
Andrew M. Soule ..... Greenville
Harvey L. Fowler (Construction) ..... Greenville
Gerald A. Chesley ..... Hartford
R. E. Nelson (Construction) ..... Jackson
C. C. McCraw (Construction) ..... Jackson
Barry M. Coleman (Construction) ..... Jacksonville
Lloyd Armstrong (Construction) ..... Jacksonville
Tracy M. Hughes ..... Kansas City
John Shelton (Construction) ..... Kansas City
William Hedges (Construction) ..... Kansas City
Jeffrey J. Kraft (Regional Engineer) .. (MWRO) Lincolnwood
Darwin C. England (Construction) ..... Little Rock
Lloyd A. Miller ..... Memphis
Sydney G. Kent (Branch Manager) ..... Memphis
George Sorenson (Construction) ..... Minneapolis
Roman Krochmalnyckyj ..... New Haven Warehouse
Dymitr Malik ..... New Haven Warehouse
Charles Jones ..... New Haven Warehouse
Jeanne Sperandio ..... New Haven Warehouse
Earnest Bruno (Construction) ..... New York
William Ellwood (Construction) ..... New York
Ralph Irving (Construction) ..... New York
Edward Martin (Construction) ..... New York
Robert Morse (Construction) ..... New York
Francis Nicholson (Construction) ..... New York
Edward O'Donnell (Construction) ..... New York
William Santino ..... New York
Nicholo Zeverino ..... New York
John F. Beatty ..... Norfolk
Arley M. Quicke (Construction) ..... Norfolk
R. L. Batch ..... Omaha
D. D. Duckert (Service) ..... Omaha
Steven E. Lasewicz, Jr. (Branch Manager) ..... Orange
Donald A. Dean ..... Pittsburgh
Sandra Diegelmann ..... Pittsburgh
Stephen L. Barker ..... Pittsburgh

(continued)

Jerry Parker (Service) ..... Portland
John McSperitt (Construction) ..... Portland
Wilfred Tetreault (Construction) ..... Providence
James M. Coleman (Construction) ..... Richmond
Lloyd Schweinsberg (Construction) ..... Saginaw
Ellis Mecham (Construction) ..... San Francisco
Milo J. Nichols (Construction) ..... San Francisco
Edward Anderson (Service) ..... Seattle
Gordon Speth (Construction) ..... South Bend
Art Rahtz ..... Toledo Sales
Alfred F. Mori (Construction) ..... Washington, D.C.
Doretta Adams ..... Wilkes-Barre
Richard K. Byo (Construction) ..... Youngstown
Raymond Ninivin ..... Courbevoie
Manual Aznar Diez (Construction) ..... Courbevoie
Jacques L. Rey (Manager) ..... Geneva
Phyllis Mossiere ..... Geneva
Thomas Reuter ..... Geneva
James F. Casey (Service) ..... Sydney
Alan McKenzie (Regional Engineer) ..... Sydney

"HOPE" FOR THE FUTURE

Included among the 1972 Loyalty Award Recipients are Ed and Willie Hope, brothers employed by our Washington, D.C. Office. Ed is a Lead Mechanic who has completed 30 years of loyal work for Johnson. Willie Hope is a Journeyman who just received his 20 year award.

The Washington, D.C. Office also has "Hope" for the future. Benny and Robert Hope, Ed's sons, are also Mechanics for the Washington, D.C. Office.

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

... by and for the Johnson SERVICE Organization.

* * *

FILTER SALES INCREASING IN GREENSBORO:

JOHNSON SERVICE COMPANY — INTER OFFICE

SUBJECT FILTERS

FROM Richard Tedder, Service Salesman, GREENSBORO

TO E. K. Schultz - SWRO

cc: G. D. Maxwell - Milwaukee #8-310
W. P. West - SERO - Atlanta

I am pleased to hear your filter sales are increasing in your region. The filter program has been a big help to our office in assisting us to get started in air conditioning service business and an overall help in the service sales program.

In answering your filter questions, first I must remind your service salesmen, Milwaukee has assigned one man to handle filter problems. Working in the capacity of service salesman, I am not kept abreast of the day-to-day problems. I will try to answer your questions to the best of my ability.

In answer to Richard Hanna's questions on roll filters sagging:

1. When ordering be sure to specify machine manufacturer and model number, also indicate if the roll is to be run horizontally or vertically.

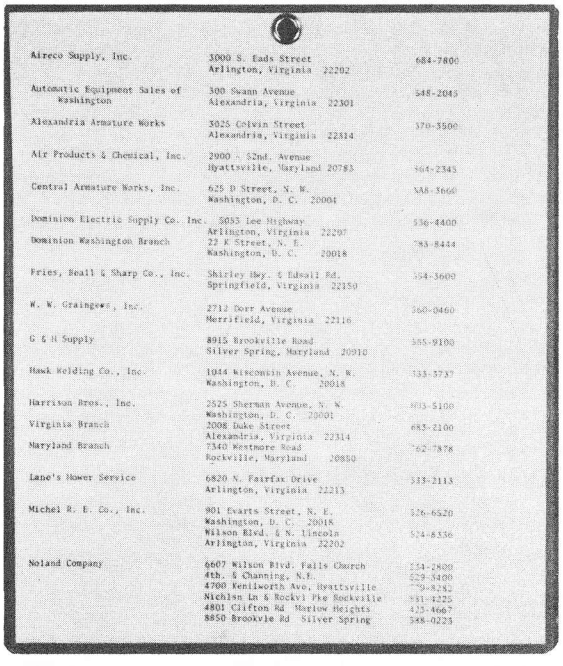
2. Always be sure to instruct the personnel changing the filters to take extra care securing the filter media to the empty roll the first time you change from fiber glass to polyester media. The reason for this is the two spools have different holding devices to secure the media to the spools.

I would like to add that we have had great success in the roll filter market. When customers would try to change back to fiber glass for economy reasons, after using our media at a higher cost, the personnel threatened to quit.

To answer your second question, I can only relate my experience in the Greensboro territory, which is the hub of the textile industry. Our filter media is a textile product. This same problem seemed to exist in our office when I started to work as service salesman. "We are priced too high, it is manufactured locally we cannot compete, we have tried and failed, etc." But if we use everything that is available to us in the way of sales tools, and the biggest sales tool that is given to each of us as salesmen is the name JOHNSON SERVICE COMPANY, you too will enjoy a profitable market as are many other offices. I know of no business operating today, in our field, that does not have all kinds of competition, both good and bad!

WASHINGTON, D.C. OFFICE: ACCOUNT LISTINGS FOR SERVICEMEN:

In our Washington, D.C. Office, Servicemen make phone calls instead of running around town trying to find material needed for a job. **Joe Mitchell** from the **Washington, D.C. Service Department** had cards made up which show names, locations and phone numbers of accounts that are called upon most often. The cards are laminated and the sample Joe sent us was 5" wide and 6" high, with printing on both sides. Cost of the cards was about 80¢ each. Joe said the cards paid for themselves the first day by eliminating lost time on the job. Any local laminating company should be able to do the job for you. SUCCESS IS . . .



Aireco Supply, Inc.	3000 S. Eads Street Arlington, Virginia 22202	684-7800
Automatic Equipment Sales of Washington	300 Swann Avenue Alexandria, Virginia 22301	548-2045
Alexandria Armature Works	3025 Colvin Street Alexandria, Virginia 22314	370-3500
Air Products & Chemical, Inc.	2900 - 52nd. Avenue Hyattsville, Maryland 20783	864-2343
Central Armature Works, Inc.	625 D Street, N. W. Washington, D. C. 20004	638-3660
Dominion Electric Supply Co. Inc.	5053 Lee Highway Arlington, Virginia 22207	536-4400
Dominion Washington Branch	22 K Street, N. E. Washington, D. C. 20018	783-8444
Fries, Beall & Sharp Co., Inc.	Shirley Hwy. & Edsall Rd. Springfield, Virginia 22150	354-3600
W. W. Grainger, Inc.	2712 Dorr Avenue Merrifield, Virginia 22116	560-0460
G & H Supply	8915 Brookville Road Silver Spring, Maryland 20910	585-9100
Hawk Welding Co., Inc.	1044 Wisconsin Avenue, N. W. Washington, D. C. 20018	333-5737
Harrison Bros., Inc. Virginia Branch Maryland Branch	2525 Sherman Avenue, N. W. Washington, D. C. 20001 2008 Duke Street Alexandria, Virginia 22314 7340 Westmore Road Rockville, Maryland 20850	483-5100 683-2100 762-7878
Lane's Power Service	6820 N. Fairfax Drive Arlington, Virginia 22213	533-2113
Michel R. E. Co., Inc.	901 Evarts Street, N. E. Washington, D. C. 20018 Wilson Blvd. & N. Lincoln Arlington, Virginia 22202	526-6520 524-8336
Noland Company	6607 Wilson Blvd. Falls Church 4th. & Channing, N.E. 4700 Kenilworth Ave, Hyattsville Nichlsn Ln & Rockvl Pke Rockville 4801 Clifton Rd Marlow Heights 8850 Brookvle Rd Silver Spring	534-2400 529-5400 779-8282 881-4225 423-4667 588-0223

Laminated Card Showing List of Accounts

CONSTRUCTION NEWS
10-72

SPOTLIGHT ON CONSTRUCTION

Undoubtedly there are many Johnson installations around the country which, because of some extraordinary features, installation methods or application problems solved, deserve special recognition. "Spotlight On Construction" will be featuring these projects as we hear about them. If you feel you have a candidate for our column, send us the details.

We'll begin with one of the largest control contracts for a single building ever awarded to Johnson Service Company, Rockefeller Center, Building #19, the McGraw-Hill Building. The job was sold by our New York Branch Office.

SPECIFICATIONS:
BUILDING #19, ROCKEFELLER CENTER:

High-Rise Building

52 stories above grade
6 stories below grade

Induction Unit Perimeter, Variable Volume Interior Control

Induction Unit Thermostats: 1700
Valves: 3500
Interior thermostats to variable volume or SCR heater control: 1400

Air Conditioning, Heating & Ventilating Systems:

54 in 5 separate equipment rooms.

Hot Water or Chilled Water Heat Exchanger Systems: 15

Control Center: T-6500 with 1000 points.
Hours of Labor: 41,000
Building Completion Time: 2½ years

Roughing Tubing

Roughing for high pressure and low pressure risers and horizontal mains was started on lower floors while the steel was being erected on floors above. Installation of controls on lower levels followed the piping and was started when the steel was at the 14th floor. Before the steel was completed the Johnson installers were only two floors behind the steelworkers. This provided an opportunity to keep the staff small and to coordinate with the other trades, and also get into areas when they were cleared of other trades and work areas were open.

Equipment Room Piping

For control air piping in the equipment rooms, which are normally double-height ceilings, the installers went to the floor below and ran horizontal mains and switching lines in bundle tubes on the ceiling of the lower floor. Wherever it was necessary to penetrate the concrete deck, the installers cut an opening, sleeved and water-proofed it to run piping to the local panels or systems. This meant that Johnson did not have to wait to run lines on someone else's hanger or on top of ductwork or work in a high ceiling area which could have required high ladders or scaffolding. It also avoided the confusion usually found in equipment rooms when six or more trades are rushing to complete their work at the same time.

Induction Unit Piping

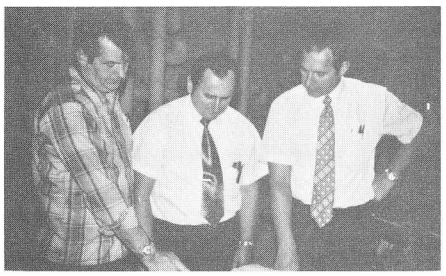
Two-tube bundled polyethylene was run on the floor of the induction unit enclosures before the units were mounted. This provided flexibility of the main air supply to the valve top thermostats and branch air from the thermostats to the valves. It was never necessary to run additional lines between enclosures and the relative location of thermostats and valves to one another was immaterial.

Large Air Compressors

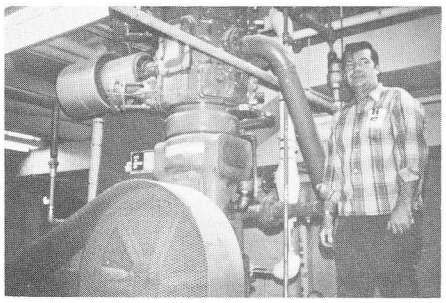
Air compressors were specified to be 50 horsepower Worthington oil-less units with water-cooled aftercooler, desiccant dryer and filters.

The McGraw-Hill Building construction was started in August of 1970. Today it is 85% complete. This is a credit to New York Branch Manager **Tom Brown**, New York Metropolitan Sales Manager **Ban Capron**, Sales Engineer **Bob Tisdale**, Manhattan and Bronx Construction Superintendent **Jos Posposil**, Area Foreman **Jim Merkel** and Job Foreman **Jim O'Keefe**.

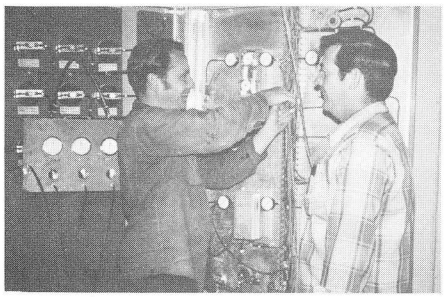
Left to right, New York Sales Engineer Bob Tisdale, Northeast Regional Engineer Bill McKay and New York Metropolitan Sales Manager Ban Capron.



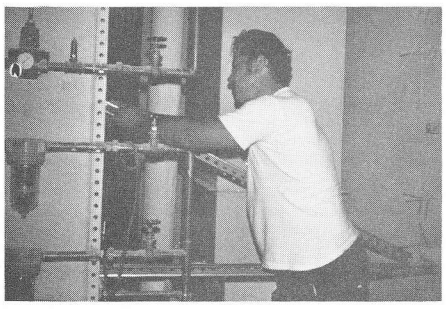
Inspecting job plans for the McGraw-Hill Building are Job Foreman Jim O'Keefe (left), Area Foreman Jim Merkel (center), and Manhattan and Bronx Construction Superintendent Joe Posposil.



Job Foreman Jim O'Keefe and one of the two air compressors in the McGraw-Hill Building. Note the size!



John Karol, left, makes final connections to one of the panels in the McGraw-Hill Building. Job Foreman Jim O'Keefe is at the right.



Paul Schreiber installs an equipment support rack.