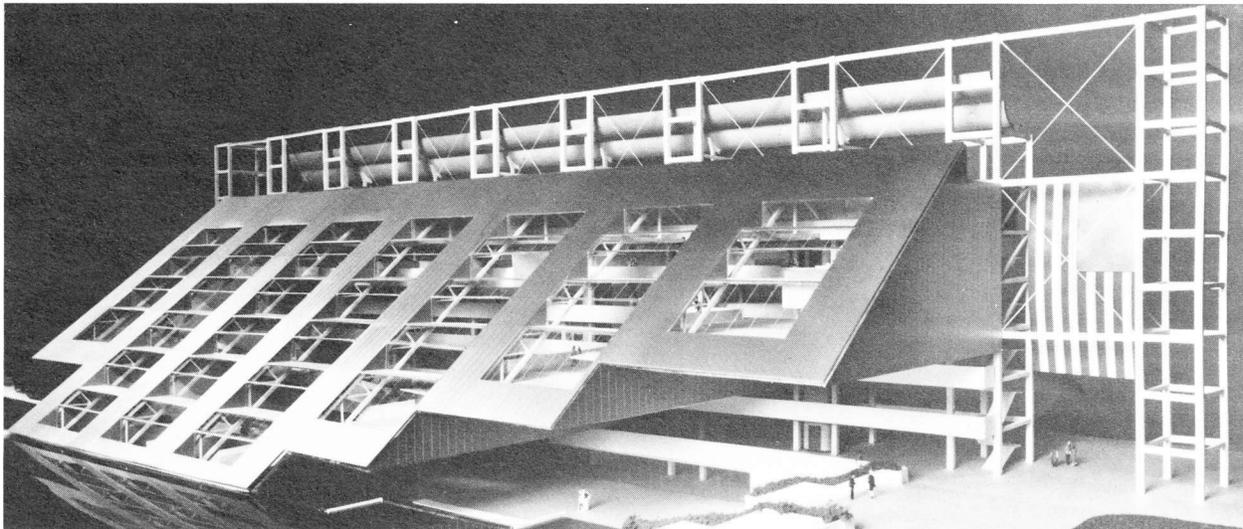


Systems & Services Division
Johnson Controls, Inc.

Monitoring *The Field*

Oct. 1981
Vol. 25, No. 10

JCI Chosen for 1982 World's Fair



Johnson Controls has announced that it will provide a computerized energy management system for the 90,000 sq. ft. United States Pavilion at the 1982 World's Fair in Knoxville, Tennessee.

The JC/85/10 will be supplied to the US Pavilion at the World's Fair through Johnson Controls SSD Knoxville branch office, which will also furnish

the environmental control system for the facility. The JC/85/10 computer keyboard, video display and printer will be visible to visitors at the pavilion.

The theme of the World's Fair is "Energy Turns the World." The six-story \$12.4 million US Pavilion will serve as an "energy showcase" during the 184-day international event, set for

May 1 to October 31, 1982. Sloping dramatically from the southern shore of the World's Fair lake, the permanent pavilion will house exhibits of high energy technology and US energy strategies for future generations. After the World's Fair, the energy-efficient structure will remain on-site as an energy research center.

Fiscal Year Ends on High Note

Fiscal 1981 ended September 30 on a high note for SSD, with record sales achieved in every category of our business. Construction volume increased by 30%. Total business secured in 1981 increased by 26% over 1980.

When all final figures become available, future issues of *Monitoring The Field* will highlight specific achievements in detail.



Service Sales

Congratulations for a DYNAMITE JOB in 1981. Our service business exceeded a 20% growth rate for the fourth year in a row.

- During 1981, 7000 series contract volume increased by 19%.
- The volume of 5000 series contracts increased by 21.7%.
- Repair billing volume increased by 20%.
- Our backlog of the number of CPM contracts more than \$1000 increased by 10%.
- Counterline sales increased by a total of 23%, with service order material sales alone increasing by 26%.

Best wishes to the entire staff who made this record achievement possible.

Tom Zukowski
National Service Sales Manager

BAS Sales

Any way you look at it, 1981 was a very successful year for BAS sales. Even more impressive is the fact that it follows a very successful year in 1980.

- During 1981, Canada and 6 of the 7 US regions achieved their BAS goals (the 7th region was at 90% of goal).
 - The number of BAS sold during 1981 was 113% of goal.
 - The number of BAS sold in 9 months of 1981 (reflecting fiscal year change) was 104% of 1980 12 months sales.
 - BAS dollar volume for 9 months 1981 was 107% of 1980 12 months sales.
 - The number of BAS sold in the past 21 months exceeds the total for the four previous years combined.
- A tremendous effort by a tremendous branch organization!

Jeff Kraft
National BAS Sales Manager

Regional managers hold annual meeting

Regional managers from the seven US regions and Canada held their once-a-year formal meeting in Milwaukee September 14-18, 1981. This year they welcomed new members to the group, Ban Capron, who was recently named manager of the Southwest region, and Pete Wrenn, who is on special assignment with the Central regional office.

The week-long meeting began with a review of SSD forecasts, goals, budget and profit planning for 1982. Throughout the course of the first three days, the agenda included discussions about the existing building market plans, including the EBM crusade, technical support, national accounts compensation, material delivery, and progress of the JC/85/40, PIC, TABS and the Special Systems Operation, San Diego.

On the fourth day the regional managers were guests at the SSD division

Branch Managers meet in Milwaukee

Managers of thirteen large SSD branches gathered in Milwaukee for a three-day meeting September 14-16, 1981. The meeting dates coincided with the regional managers meeting, thus allowing the two groups to hold several joint sessions.

The branches represented were Houston, Indianapolis, Milwaukee, Chicago, Toronto, Washington, DC, Los Angeles, New York, Detroit, Boston, Dallas, Philadelphia and Edmonton.

The purpose of the meeting was to discuss similar concerns relating to operation of a large branch office, and to suggest possible solutions for common problems.

The agenda included three major topics; support services, organization and people, and products/markets. Specific discussions covered the status of the branch terminal project, management information requirements, and vehicles and fleet policies.

Career planning, in-branch training, manpower loading, recruiting, and salary administration were included in the personnel discussions. The products/markets topic included branch goal setting, strategies for combating new competition, status of BAS and the future of TABS, APS and EBM. The meeting concluded with a report to regional and Milwaukee managers.

meeting, a regular monthly review attended by Milwaukee managers of accounting, ATC, BAS, marketing, manufacturing, personnel and sales. Happenings of the past year were discussed, as were plans for 1982.



Frank Sterner, Johnson Controls vice president of Human Resources Management (left) captured the attention of Si Reedy (Pacific Coast) and Jim Kelm (Southeast) during the regional managers meeting in Milwaukee. They were discussing performance reviews and goal setting.

Sales managers to visit regions

Bruce Ashenfelter, vice president and SSD sales manager, and Harvey Siebert, vice president of field operations, have scheduled a nationwide tour which will include visits to all US regional offices and Canada.

Mr. Ashenfelter will begin by attending the Canadian sales meeting in Toronto October 13-16. From there, the two men will meet with branch managers in the Pacific Coast region.

Visits to all regions are planned to be completed by the end of November. Meetings will usually take place in the cities where our regional offices are located. The visits will provide the opportunity for our branch managers to meet with our new sales management team.

Monitoring The Field

Oct. 1981
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Published monthly at Milwaukee, WI for employees of the Systems & Services Division, Johnson Controls, Inc.

Managing Editor, Mary Beth McKibbin

Contributing Editors: Joe Bartoletti, TABS; Lou Davit, Installation/Engineering; Dale Hawley, Service; John Levenhagen, Counterline; Patricia Ludwig, BAS; Terry Meinholdt, APS; Bob Stahl, ATC; Diane Wagner, Quality Assurance; Richard Walker, Federal Energy Programs.

Letters may be addressed to the Managing Editor, *Monitoring The Field*, Johnson Controls, P.O. Box 423, Milwaukee, WI 53201.

JOHNSON
CONTROLS

New products introduced at trade shows

Access Control System



The JC/85 Access Control System (JC/85/ACS) was introduced at the American Society for Industrial Security show in New Orleans. The new system is a flexible, cost-effective badge access system featuring micro-processor-based badge processing units. The access system was well received and the show was a success.

Our exhibit staff worked perfectly in unison, resulting in a high number of sales leads. An access control system manual was sent to the branches in September. It provides a comprehensive picture of the overall functions, capabilities and engineering requirements of the JC/85/ACS.

Power/Perfect 5000

Johnson Controls unveiled the new Power/Perfect 5000 (MTF, June, 1981) energy management system at the Fourth World Energy Engineering Congress in Atlanta the week of October 13th.

The PP/5000 is intended for small buildings ranging in size from 10,000 to 80,000 square feet, such as branch bank offices and small medical centers. It can cut energy costs from 10 to 30 percent, depending on how much energy was being wasted before its installation.

Comments about the Power Perfect/5000 have been favorable . . .

"Johnson Controls has such a big name that you figure they've got the resources to put out a good product." (New York telephone company energy manager)

"I'm sure their new EMS will be a good product . . . they have a good name and I'd have to assume they'd do a good job." (competitor)

"I was not aware of the fact that this product was so versatile. After seeing a demonstration, I was very much impressed with the ease of operation and programming. The English language prompting feature is very unique for a stand-alone low-level energy management system." (JCI branch salesman)

Business/market classifications clarified

October 1, 1981 marked the beginning of the new fiscal year, 1982. This coincides with some significant revisions in our business classification policies.

Increased SSD emphasis on specific *market* opportunities requires the proper classification of *business* secured, so that our company can be managed effectively.

It is important to note that business classification (construction and building services) is now defined separately from *market* classification (new building market and existing building market). A part of the construction *business* and all building services *business* make up the total existing building market.

Building Services

The traditional term, "Service Sales" *business*, has been changed to "Building Services" to more correctly identify the broadening of the service sales program in implementing the existing building *market* strategy. This change will be reflected in all new promotional

literature scheduled for release to the field.

Reasons for Change

There are several considerations that influenced the revision of our business classification policy.

- To classify and account for our business in areas where we want the greatest emphasis.
- To clarify the classification of retrofit/upgrade, expansion/installation type projects in existing buildings:

Johnson Controls initiated and negotiated (Building Services)

vs.

Non-Johnson initiated and competitively bid (Construction)

- To approach our business as our competitors do.
- To look at our business as our customers would expect us to.
- To look at our business in a way that the majority of our own personnel will feel most comfortable with.

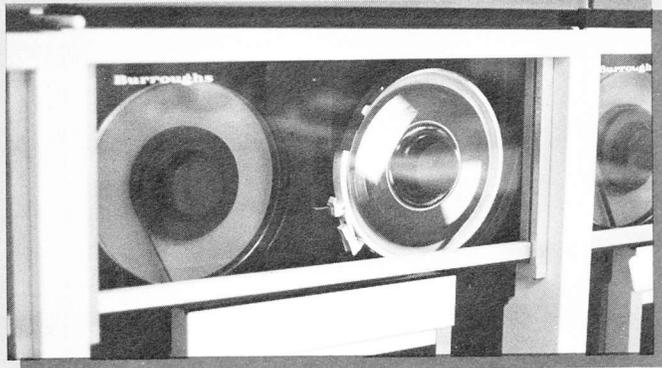
- To minimize change from tradition.

Detailed breakdowns of business classes and market classes are explained in sales memo 178, 10/1/81.

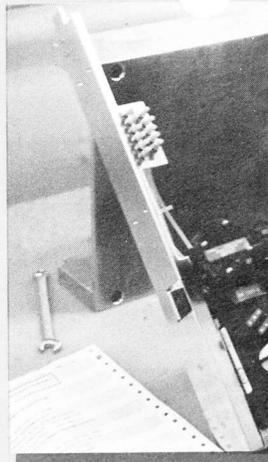
PIC orders reach record high

The number of PIC orders placed by our branches during September was the highest since the system was introduced. Forty-eight orders were placed by JCI branches for a record 97 PIC systems. Branches that applied this unique product for the first time in September were Birmingham (4 units); Charleston (11); Chicago (6); Detroit (1); Seattle (2); Wilkes-Barre (4), and Greenville (22).

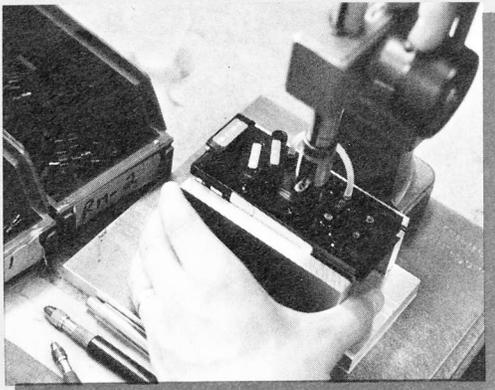
PIC . . . From Design To Delivery



(1) After the branch office has designed and released a PIC (Pneumatic Integrated Control) system order, via the branch terminal, activity begins in Milwaukee. Branch design information is transferred to the order processing computer, via tape disc, at the end of each day.



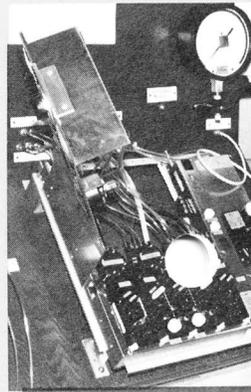
(6) The PIC system is being assembled.



(2) PIC system function modules are assembled and always in stock, ready to be used on a PIC system.



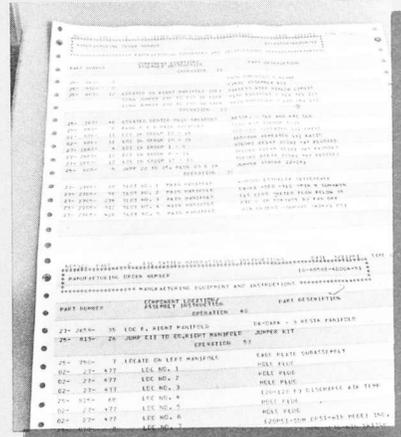
(3) Before being put into stock, each function module is tested for every function it will perform. John Meyer, Field Engineering, Milwaukee, is demonstrating the testing procedure.



(8) The assembled PIC system is being tested on a computerized test system according to the branch office specifications. Perkins is shown using the test system. Not all modules are allowed to pass inspection before they are met.



(4) The Milwaukee computer generates a package of information that includes a material requisition. This requisition lists all subassemblies required to build a PIC system. The subassemblies are then placed into bins to wait for assembly into a PIC system.



(5) The Milwaukee computer also generates the manufacturing instructions used to build the PIC unit.



(10) The PIC system is being packaged. Protective covers are placed over the modules.

Cedar Rapids on the radio

The college football season is in full swing and Dutch Coon, manager of the Cedar Rapids branch, is taking advantage of widespread fan interest by advertising Johnson Controls during radio broadcasts of University of Iowa games.

Dutch submitted his radio commercial after reading the guidelines in our new Branch Promotional Guidebook (one copy sent to each US and Canada branch in July). He reports that the ads have resulted in a sizable number of inquiries to his branch.

The commercial was recorded in Milwaukee by George Huhnke, SSD manager of Marketing Communications, who is a professional narrator/announcer.



Branch Advertising

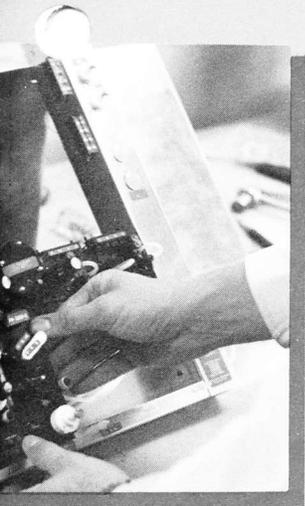
While local branch advertising may not be "right" for every branch and every product or service, it does have effective applications.

Instructions for implementing a branch advertising plan, including radio spot advertising, are presented in a step-by-step format in the BPG. Branches can select a plan for print media (magazine or newspaper) advertising, direct mail, yellow pages or trade shows. Ten and 30-second sample radio commercials for service, TABS, and energy conservation are included in the guidebook.

Various sizes and types of reproducible ads are included in the book and are ready for branch use after simply adding the local address and phone number. The Promotional Merchandise Catalog and Sales Promotion Material Catalog are also included in the book.

The BPG contains a wealth of worthwhile data about advertising in general, and will be interesting for all branch people to read.

Specific advertising programs must have regional approval, and advance discussion with Marketing Communications, Milwaukee is suggested.



assembled.



(7) Lee Sharafinski from our Milwaukee Industrial Engineering Department checks assembled PIC systems. Systems are connected to supply air for 24 hours before being tested.



System then undergoes final test panel where it is adjusted to design requirements. Cora [unclear] test panel. PIC systems are [unclear] until branch requirements



(9) After the test and adjustment procedures have been completed, three copies of the procedure are printed by the computer. One copy is sent with the PIC unit, one is sent directly to the branch office, and the third is retained on file in Milwaukee.



System ready for final inspection.



(11) Within 30 days from the time the PIC order was first received in Milwaukee, the system is ready for shipment.

Product Application

What's New



The **T-4100-103** universal wallplate can be used with T-4100 and T-4600 thermostats for exposed tube mountings. It is large enough for most applications when converting from old Johnson or competitive thermostats. This item is listed on price sheet ATC-76.



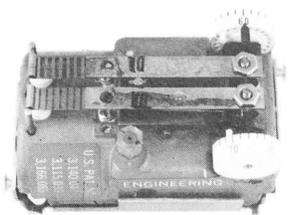
This new **T-4000-109** solid plastic cover has many potential applications. The cover has no air holes, so the "wall mass" will be sensed, and not the air in the surrounding area.

The cover can be used with the TE-1800-55 wall-mounted element used as a mass transmitter for the C-7505-1. Another potential application would be for use as a temporary dust protector for controllers and transmitters installed long before a job is turned over to the customer.



C-2040 cumulator introduced . . . in mid-September, an announcement was made to the field that the C-204 averaging cumulator was being discontinued. All factory orders will now be filled with the new C-2040 averaging cumulator. This new cumulator averages from two to four pneumatic signals from relay or non-relay devices. All inputs not used are simply capped. Note that all connections are 5/32" barbed fittings.

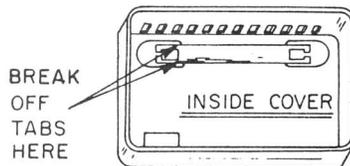
Some tips about the T-4054



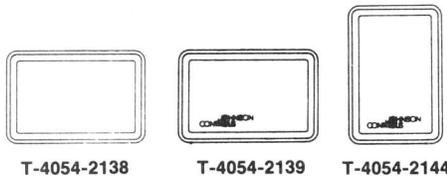
The T-4054 dual-dial energy manager thermostat was introduced in the August, 1981 issue of MTF. Since that time, each branch (manager) in the US and Canada should have received a working sample of the device, along with an instruction booklet. Some additional facts should be clarified.

- 1) The factory is currently substituting T-4054s for all T-4052 orders that have been placed.
- 2) New orders for the T-4054-1 (direct acting) and T-4054-2 (reverse acting) will be filled after all T-4052 orders have been filled.
- 3) **Plastic covers** already on order, and those in the field, **will not fit** the new T-4054. The thermometer holder

(inside, above window) on the plastic cover will interfere with the upper set point dial on the new thermostat. (The tabs can be removed by the branch.)



Three new covers to fit the T-4054 will be available from the factory:



If the old plastic covers cannot be modified in the field, contact Sharlene Wardinski, Milwaukee M-2, phone 4417, to change your order to one of the new covers.

- 4) **Metal covers without thermometers** can be used with the T-4054.

RECALL

SSD has recalled all cans of leak detector (T-9999-2) from the branch offices because of toxic conditions that can occur due to *misapplication*. A notice has been sent to each branch manager stating that all leak detector is to be returned to Milwaukee's salvage department.

Recent tests of several liquid leak detector products show that these products, depending on their formulation, can cause cracks in stressed polyisofone plastic parts (such as the T-9000 and the PIC system). Cracks do not always form immediately when the leak detector is applied, but cracks may develop within hours or days after the application.

The fact that some of these products conform to Military Spec MIL-L-25567C is no assurance that they are safe to use with plastics. To date, the following external leak detector products have been tested and produced the following results.

Leak-Tech #372E (American Gas & Chemical Ltd.)	Causes Cracks
Squirt-In Bubbles Leak Detector (Guy Speaker Co., Inc.)	Causes Cracks
Sherlock Leak Detecot (Winton Products Co., Inc.)	No Cracks
Search Leak Detector (Watsco, Inc.)	No Cracks
Snoop Leak Detector (Nupro Co.)	No Cracks

If you are using a leak detector that is not listed here, it is advisable to check with the Materials Lab in Milwaukee, phone 4759, to verify the effects of the formula on polyisofone plastic parts.

Around Johnson

Tuition Assistance policy revised

Johnson Controls tuition assistance policy is intended to encourage and support the development of employees for the mutual benefit of the employee and the company.

Standard Practice Instruction (SPI) 11-7, which covers the tuition assistance policy, has been revised and sent to the branches (dated 9/4/81).

Major revisions to the policy include accreditation requirements for schools, colleges and universities, special approval requirements for those wishing to take more than two courses, and the discontinuance of any payment prior to the completion of the course, regardless of the cost of tuition.

Because a large number of SSD and SECD personnel currently receiving tuition assistance are accustomed to the immediate reimbursement of the first one-third of tuition over \$150, this practice will continue through the spring semester of 1982. However, any application for a course which starts on or after June 1, 1982 will be covered by the new payment policy.

Application for tuition assistance (Form 6913) must be approved by the immediate supervisor, branch manager and the SSD Tuition Assistance Administrator, Rosemary Stewart, Milwaukee M-17, phone 4743.

Insurance claims

After October 1, 1981 US branch salaried employees will no longer submit medical and dental insurance claims to Johnson Controls' benefits department.

Under the new policy, insurance claims are to be sent directly to our insurance carrier, Metropolitan Life Insurance Company.

Separate medical and dental insurance claim forms for mailing to Metropolitan have been sent to each branch. Employee identification cards with our group insurance number have also been distributed.

Additional forms are available from the Stationery Department in Milwaukee. Be sure to specify "Medical" or "Dental" when you order the forms.

Ed Travis — 25 years



Employees in the Greensboro, NC branch surprised ED Travis, manager, with a golf sculptured cake to celebrate his 25 years of service with Johnson Controls. The cake had a sandtrap, water hazard, and a pin to mark the 25th hole. Employees expressed appreciation for his years of dedicated service and wished him good luck on his way down the 26th fairway.

JCI Alphabet Soup

A list of Johnson Controls acronyms, abbreviations and their definitions is presented on Page 8 of this issue of *Monitoring The Field*. The list is intended to assist you in your communications on the job, and should be especially helpful to new employees who must often learn a completely "new language" at Johnson Controls. Many of these acronyms and abbreviations are encountered on a daily basis, often with no mention of the complete title. It is suggested that you retain the list in your office area for future reference. Additions to the list are welcome; contact the MTF editor.



William L. Rootham
Vice President

AN OPEN LETTER FROM JOHNSON CONTROLS, INC.

Johnson Controls, Inc.
5757 N. Green Bay Avenue
Post Office Box 591
Milwaukee, WI 53201
Tel. 414/228 2103

William L. Rootham
Vice President

**JOHNSON
CONTROLS**

Dear Reader:

Perhaps you were among the readers who participated in the Energy User News survey that "produced evaluations of all major manufacturers of energy management systems." To all who participated, I wish to express my appreciation and, at the same time, make a personal request.

First, thank you for the many favorable comments and the high rank you gave us among the "high recognition companies". On balance, we were, of course, extremely pleased with the results.

My personal request relates to the fact that some dissatisfaction was expressed. Since we at Johnson Controls have always strived for 100% satisfaction, we'd like to correct this situation. Will you please write or telephone me so that we can discuss your difficulty and arrive at a solution? I can assure you that corrective action will be taken.

Sincerely,



William L. Rootham
Vice President

SATISFACTION GUARANTEED:

This message from Johnson Controls appeared in the October 12th issue of *Energy User News*. Prominently occupying an entire page in the paper (reduced size shown here), the ad was placed at the request of Mr. Rootham. "It's a strong testimonial to our dedication to customer satisfaction and our field organization's ability to provide that satisfaction," commented Ron Caffrey, vice president, Marketing.

SSD Acronyms and Abbreviations

ACS	Access Control System	MCC	Manufacturing Coordinating Committee
AE	Application Engineer	MDC	Material Destination Charge
AECS	Automatic Energy Control System	MIS	Management Information System
AHU	Air Handling Unit	MMRA	Memorandum of Material Return and Allowance
AMPS	Advanced Marketing Profile System	MRA	Material Return Allowance (See DMRA, MMRA)
ASHRAE	American Society of Heating, Refrigerating & Air Conditioning Engineers	MSG	Management Selling Guide
ATC	Automatic Temperature Control	MSR	Material Status Report
ATS	Available To Ship	MTF	Monitoring The Field
AVO	Avoid Verbal Orders	MTBF	Mean Time Between Failures
BAS	Building Automation System	MWRO	Midwest Regional Office
BEIMS	Branch Engineering & Installation Management Standards	NBM	New Building Market
BEPS	Building Energy Performance Standard	NERO	Northeast Regional Office
BOM	Bill Of Material	NTO	Notice To Obsolete
BOPS	Branch Operating Profit & Statistics (Report)	OEM	Original Equipment Manufacturer
BPD	Branch Purchasing Directory	OSHA	Occupational Safety & Health Act
BPG	Branch Promotional Guidebook	PACE	Planning Allocation Control & Evaluation
BSSM	Branch Service Standards Manual	PCMS	Project Control Management System (SECD's PPCS Program)
CARG	Corporate Applied Research Group	PCRO	Pacific Coast Regional Office
CASM	Cybertronic Application & Systems Manual	PIC	Pneumatic Integrated Control
CCS	Construction Cost System	PMI	Preventive Maintenance & Inspection
CCTV	Closed Circuit Television	PMI	Person/Machine Interface
CIE	Central Installation Engineering	PN	Part Number
CIS	Career Information System	POM	Point Of Manufacture
CIS	Construction Information System	PPC	Product Planning Committee
CIS	Contract Information Summary	PPCS	Project Planning & Control System
COS	Closed Order Summary	PPI	Project Performance Index
CPD	Control Products Division	PRB	Product Review Board
CPM	Custom Programmed Maintenance	QA	Quality Assurance
CPU	Central Processing Unit	QPL	Qualified Products List
CRO	Central Regional Office	RDW	Richard D. Wilson, VP & SSD Gen. Mgr.
CRT	Cathode Ray Tube (Video Display Unit)	RIM	Regional Installation Manager
CSA	Canadian Standards Association	ROA	Return on Assets
CS²M	Calibration, Startup, Service & Maintenance	ROI	Return On Investment
DDC	Direct Digital Control	RPQ	Request For Price Quotation
DMRA	Defective Material Return & Allowance	RQA	Release to Quality Assurance
DPU	Distributed Processing Unit	RSSM	Regional Service Sales Manager
EBM	Existing Building Market	RTM	Release To Manufacture
EC²	Energy Conservation Control	RTP	Release To Production
ECO	Engineering Change Order	RTS	Release To Sales
EFACT	Energy Facts (computerized energy study)	R&S	Repair and Service
EMS	Energy Management System	SAC	Salary Administration Committee
EMCS	Energy Monitoring & Control System	SAM	Security Alarm Manual
EQM²	Engineering, Quality Assurance, Manufacturing, Marketing	SAM	Standard Application Manual (Pneumatic)
ER	Engineering Report	SECD	Systems Engineering & Construction Div.
FES	Fluid Engineering Services	SERO	Southeast Regional Office
FID	Field Intelligent Device	SM	Sales Memo
FO	Factory Order	SMR	Stock Material Request (Form 812)
FPU	Field Processing Unit	SMVR	Scheduled Maintenance Visit Report
FSMO	Factory Software Maintenance Operation	SN	Serial Number
FY	Fiscal Year	SN	Standardization Notice
GBD	Globe Battery Division	SPI	Standard Practice Instruction
HVAC	Heating, Ventilating & Air Conditioning	SRB	Systems Review Board (BAS review committee)
IC²	Integrated Control Centers	SSD	Systems & Services Division
I/O	Input/Output	SSO	Special Systems Operation (San Diego)
IRTM	Introductory Release to Manufacturing	SSG	System Software Generation
JCFS	Johnson Controls Financial Services	SWRO	Southwest Regional Office
JCI	Johnson Controls, Inc.	TABS	Time-Shared Automated Building Service
JCII	Johnson Controls International, Inc.	T&B	Test and Balance (FES)
JCL	Johnson Controls, Ltd/Ltee (Canada)	TCC	Technical Coordinating Committee
K&M	Kieley & Mueller	TNT	Terrific New Tools (Serv. Dept. Memos)
MARO	Mid-Atlantic Regional Office	UL	Underwriters' Laboratories, Inc.
MCC	Motor Control Centers	ULC	Underwriters' Laboratories of Canada
See also:		UV	Unit Ventilator
1) Johnson Controls "Glossary of Terms" (Publication 2062)		VAV	Variable Air Volume
2) BAS Glossary of Terms (JC/85 Sales Resource Manual)		YTD	Year to Date