



UNITED STATES GENERAL ACCOUNTING OFFICE
WASHINGTON, D.C. 20548

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FEDERAL PERSONNEL AND
COMPENSATION DIVISION

JANUARY 7, 1981

B-201646

The Honorable Jule M. Sugarman
Deputy Director, Office of
Personnel Management



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Dear Mr. Sugarman:

Subject: [Use of Quality Control Circles in
the Federal Government] (FPCD-81-31)

We recently completed a limited survey on the use of quality control (QC) circles in the Federal sector in which we reviewed the available literature on QC circles and contacted program managers at 2 private corporations and 10 Federal agencies. This survey was intended to ascertain the extent to which QC circles were being used in the Federal sector. Enclosure I to this letter contains general information on Federal QC circle programs we identified.

Our survey indicated that the use of this productivity enhancement concept seems to be growing rapidly throughout the Federal Government, particularly in the Department of Defense. At the same time, participating agencies do not appear to be routinely establishing systematic methods to evaluate their programs. Given this situation and the important role that your agency plays in promoting and overseeing Federal productivity programs, we want to share with you our observations and concerns.

QC circles are small groups of employees, generally from the same work area, led by their first-level supervisor who meets regularly on a voluntary basis during normal working hours to identify, analyze, and resolve job-related problems. The participants generally receive advance training in problem solving. QC circles are founded on the concept that productivity improvements come not only from technological change but also from greater employee motivation and involvement in the work. Through QC circles, Federal agencies generally attempt to increase operational efficiency and enhance product quality through more effective teamwork and communications.

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QC circles made their initial appearance in Japan during 1962 and have expanded in that country to include over 7 million workers. The first QC circle program in the United States was started by a private corporation during 1974. Since that time over 100 U.S. firms have experimented with the concept.

Reportedly, the Ogden Air Logistics Center, Utah, and the Norfolk Naval Shipyard, Virginia, instituted the first two Federal QC circle programs in early 1979. By the end of calendar year 1980, at least 13 Federal agencies--10 defense and 3 civil--will have programs underway which encompass over 200 active circles. Those applying QC circle techniques will include all three military services, your agency, the Defense Logistics Agency, and the Federal Aviation Administration. These agencies' programs cover a broad range of governmental activities, including administration, maintenance, supply, and distribution which enable employees in various General Schedule and Wage Grade categories to participate.

Those agencies which have implemented the concept told us they plan to increase the scope of their programs. In addition, individuals in other organizations, such as the Navy Material Command, Naval Sea Systems Command, and Defense Construction Supply Center, have become aware of the concept and said they will also be considering potential applications.

On the basis of our limited work, participating agencies do not seem to be routinely establishing systematic methods to evaluate their programs. Four QC coordinators told us that their initial goals were to get the circles underway and that they planned to develop appropriate measurement and evaluation systems at a later date. Three coordinators, however, indicated that they had no plans to evaluate their programs.

Our discussions with four QC program coordinators indicated that they had only a limited knowledge of other Federal QC circle programs and, therefore, could not benefit from the lessons learned elsewhere. These coordinators also said that existing training materials on QC circles were not well suited for their use and that the materials were structured almost entirely to private enterprise and the "production-line" environment. These Federal officials expressed a need to modify these materials so they addressed the unique aspects of Federal agency activities. Personnel specialists in your Chicago region agreed with this and stated that they eventually hoped to develop training modules specifically tailored to governmental operations.

Also, according to several program coordinators, their agencies have not set up separate budget accounts for QC circle activities. As a result, these agencies are not tracking the incremental program costs of determining total expenditures. One agency we contacted plans to spend nearly \$500,000 in fiscal year 1981, and it is likely that other agencies, given the size of their QC programs, could be expected to spend \$100,000 or more in the same period. If QC circles continue to expand throughout the Government, total annual Federal outlays could reach into the millions of dollars.

Personnel from your agency told us that a research contract is being negotiated between them and the Social Security Administration to identify factors contributing to QC circle success and to determine which are transferable to other Federal agencies. Unfortunately, this project may not be completed until early 1983, well after a significant number of agencies will probably have initiated and expanded their programs at a substantial cost. We also understand that your agency is preparing to issue a report under the Exemplary Practices Program on the QC circle experiences at the Norfolk Navy Shipyard. Both of these efforts, we believe, will be beneficial toward building more effective QC circle programs.

We believe that the implementation and expansion of any major productivity initiative should be part of a Government-wide strategy to guide its development and should be based on sound program planning and evaluation. Together, these activities allow managers to set realistic goals and later determine whether they have been achieved. In addition, program evaluations assist managers in identifying and pursuing those factors which assure greater probabilities of success, enable them to adapt their programs to changing agency needs, and provide the information needed to hold them accountable for their performance.

Given the apparent rapid expansion of Federal QC circles, you may wish to reexamine the need for your agency to have greater involvement in the area, particularly in assuring that there is a guiding strategy behind their expansion and that adequate evaluations are being conducted. Also, you should consider (1) speeding completion of the research project with the Social Security Administration if possible, (2) developing training materials to fit Government operations, and

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(3) accelerating the process by which the lessons learned in both the private and Federal sectors can be disseminated more widely to potential QC circles.

Sincerely yours,



H. L. Krieger
Director

Enclosure

FEDERAL QUALITY CIRCLES PROGRAM SUMMARY

AS OF NOVEMBER 6, 1980

<u>Agency</u>	<u>Number of circles</u>	<u>Location</u>	<u>Operations involved</u>
Federal Aviation Admin- istration: Southern regional office	a/ 3-4	Atlanta, Ga.	Personnel/recruiting
Covington Airway Facilities sector: Covington sector office	1	Boone Co., Ky.	Navigation aids main- tenance
Louisville sector field office	1	Louisville, Ky.	
Lexington sector field office	1	Lexington, Ky.	
Owensboro sector field office	1	Owensboro, Ky.	
Office of Personnel Management: Chicago area office (note b)	1	Chicago, Ill.	Recruiting
Defense Logistics Agency: Defense Logistics Service Center	17	Battle Creek, Mich.	Administrative services/ logistics support/ cataloging
U.S. Navy: Naval Ordnance Station	3	Louisville, Ky.	General assembly and overhaul/fire control assembly, repair and overhaul

ENCLOSURE I

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<u>Agency</u>	<u>Number of circles</u>	<u>Location</u>	<u>Operations involved</u>
Norfolk Navy Shipyard	42	Portsmouth, Va.	Planning/engineering/ production/supply/ public works
Charleston Naval Shipyard	7	Charleston, S.C.	Planning/production supply/public works
U.S. Army: Depot Systems Command	<u>c/</u> 22-66	Eleven major de- pots, nationwide	Maintenance/supply
Automated Logistics Management Systems Activity (note a)	<u>b/</u> 4	St. Louis, Mo.	Unknown
^N U.S. Air Force: Oklahoma City Air Logistics Center	38	Tinker Air Force Base, Okla.	Distribution/mainte- nance material manage- ment administration
Ogden Air Logistics Center	16	Hill Air Force Base, Utah	Maintenance
Warner-Robbins Air Logistics Center	12	Robbins Air Force Base, Ga.	Distribution/material management/mainte- nance administration
Air Force Reserve per- sonnel Center (note b)	4	Denver, Colo.	Unknown

a/These circles were to be formed in November 1980.

b/These agencies were not contacted directly during the survey. Information on their use of QC circles came from other sources.

c/Two to six circles were to be formed at each depot by the end of 1980. Depot Command Officials believe they would surpass this goal.