

Management Services: A Magazine of Planning, Systems, and Controls

Volume 8 | Number 1

Article 1

1-1971

People, Events, Techniques

American Institute of Certified Public Accountants

Follow this and additional works at: <https://egrove.olemiss.edu/mgmtservices>



Part of the [Accounting Commons](#)

Recommended Citation

American Institute of Certified Public Accountants (1971) "People, Events, Techniques," *Management Services: A Magazine of Planning, Systems, and Controls*: Vol. 8: No. 1, Article 1.

Available at: <https://egrove.olemiss.edu/mgmtservices/vol8/iss1/1>

This Article is brought to you for free and open access by the Archival Digital Accounting Collection at eGrove. It has been accepted for inclusion in Management Services: A Magazine of Planning, Systems, and Controls by an authorized editor of eGrove. For more information, please contact egrove@olemiss.edu.

people, events, techniques

AT&T Requests FCC to Hold Hearings on Applications by Competitors To Establish Intercity Specialized Common Carrier Communications

The American Telephone and Telegraph Company has asked the Federal Communications Commission to hold hearings on a Common Carrier Bureau proposal that would permit competition in specialized intercity communications.

The Bureau has proposed to accept applications for 1,700 microwave radio stations from several firms that want to enter the field of intercity specialized common carrier communications. (See M/S, May-June '70, p. 12.)

AT&T believes, "The hearings should consider whether the benefits competition might bring to particular parties are great enough to

offset the possible adverse effect on users of communications services in general."

Common ground rules asked

If the proposed FCC hearings decide the public interest will best be served by competition, AT&T requests the FCC set down ground rules for all carriers and clearly state that all existing carriers will be permitted to compete fully and fairly.

AT&T says it is willing to compete but the competition "must be real, and it must be permitted to run its natural course." (See M/S,

November-December '70, p. 16.)

In another action, AT&T has applied for the FCC's authorization of a domestic satellite system that would operate as part of the Bell System's nationwide communications network.

The proposed system would include two 10,800-circuit satellites in geostationary orbits and five earth stations. This system would carry long distance telephone and Picturephone calls, data services, and some television programming. It would service all states except for Hawaii.

AT&T intends to lease the satellites from the Communications

stations would be owned and operated by AT&T. They would be located in DeLuz, Calif., to service the West Coast; Mena, Ark., for the Southwest; Hanover, Ill., for the Midwest; Hawley, Pa., for the Northeast; and Woodbury, Ga., for the Southeast.

The company claims it can have the satellite system in operation 30 months after the FCC's approval of the proposal.

Richard R. Hough, president of AT&T's Long Lines Department, said, "With a minimum rearrangement of circuits the system can be shared by various sections of the country or by services having different usage peaks. The system's flexibility also lies in the capability it offers to overcome circuit shortages caused by unexpectedly large demands due to natural disasters or other causes."

Datran charges delay

Another document recently filed with the FCC is a request by Datran (Data Transmission Company) for special interim authority to begin immediate construction of its nationwide data communications system. Datran charges that AT&T is doing everything possible to block the construction of the \$375,000,000 microwave network Datran has designed.

Datran accused AT&T of "continuing to use regulatory responsibilities and adjudicatory process of the Commission for the sole purpose of preserving (the telephone company's) competitively advantageous position." Despite AT&T's assertions that it supports competition, it has insisted that extended hearings are required on the issue of competition vs. monopoly. These would delay the start of Datran's communications system while AT&T is implementing its own plans for a digital data network, Datran charges. (See M/S, November-December '70, p. 16.)

William M. Ellinghaus, AT&T president, has publicly stated that his company does not want to bar

"If AT&T's management is sincere about wanting the same ground rules for all parties, they will support our application for interim construction permits. We think the time has come for the telephone company to close the gap between its words and its deeds, and concentrate on acting in the public interest."

Customer Services Need 'Systems Approach,' Consultant Says

Manufacturing companies in many cases could improve their customer service function if they applied a "systems approach" to it, Robert C. Montgomery, a director of Drake Sheahan/Stewart Dougall Inc, says in the November issue of his firm's newsletter.

The management consultant observes, "Many companies with costly customer service problems are in trouble because they have a customer service grab-bag of inside sales, order entry, production scheduling, and handling of inquiries and complaints—but little understanding of how the pieces should be fitted together to maintain the company's competitive posture, and its profits."

Mr. Montgomery says that one company president who decided to find out what really happened to orders that landed in the customer service department discovered that many daily customer service decisions were being made by people at the clerical level or in the firm's warehouses. These decisions had very little consistency and were often costly.

to put customer service on a competitive, profit-oriented basis. Mr. Montgomery suggests a five-point program be followed. First, objective measurements of what customers are currently getting in the way of service and what they need should be made. Then the competition should be measured, for in some commodities customer service may represent the only competitive difference between one firm and another, Mr. Montgomery points out.

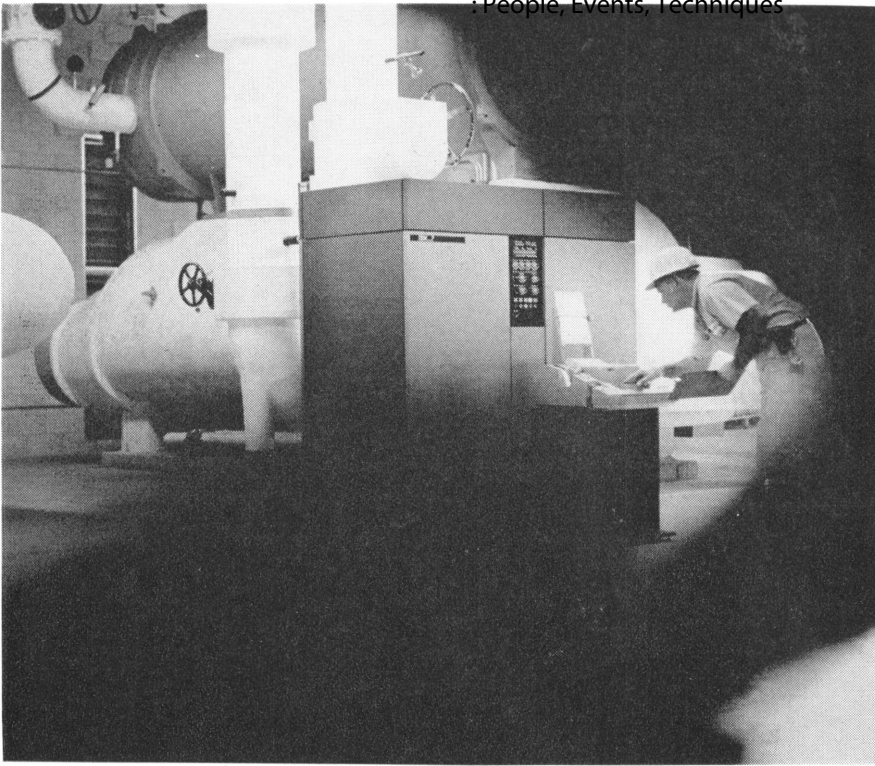
Third, customer service standards and requirements should be set. "Developing an effective customer service organization and decision rules to govern its activities cannot be started until its objectives have been clearly and unequivocally stated," the consultant maintains.

Customer orientation essential

Then the customer service function should be organized on a systems basis. "In short," he says, "the customer service function must have not only the capability of processing customer orders rapidly and efficiently but also the capability of retrieving information—tracking orders systematically—rapidly and efficiently. It must have an effective management information system geared to its stated requirements. Granted that most firms are already using computers, few are using them to the extent to which they could and should be using them in customer service applications."

However, Mr. Montgomery cautions, "Perhaps the most important thing that can be said about the customer service function, short of going into an engineering explanation of its structure, is that it must be designed so that it is customer-oriented rather than system-oriented."

Finally performance should be monitored. "On an exceptions-reporting basis, monitoring the system is routine . . . but not so routine that management should forget about it altogether," he said.



The IBM System/7 can run unattended in process environments. Sensing devices in the low-cost unit use data received to guide and adjust the manufacturing process.

IBM Invades Machine Tool Field Through Introduction of Low-Cost Industrial Computer

Two new low-cost computers, one for the office and one for factory production control, were introduced by IBM last month.

The IBM System/3 Model 6, the office computer, is a new version of the System/3 introduced last year for small business accounting applications. The System/3's used punched cards as the main source of input. The new Model 6 features direct data entry from a keyboard similar to a typewriter's and allows conversational problem solving as well as offering ledger card processing.

The IBM System/7, the industrial computer, is a small sensor-based system, which can operate by itself to collect quality control data from testing devices on a manufacturing line and keep a production count of acceptable products. In applications where a great many diverse operations occur simultaneously, IBM hopes

to market several individual System/7's at critical points in each operation. Each System/7 could automatically relay information to a larger central computer which could coordinate the entire production process.

New field for IBM

Thus, IBM is attacking a field until now pretty well reserved to machine tool manufacturers by building a system which can control one operation at a time but that, set up in tandem fashion, can also control a number of operations. IBM points out that System/7 makes it possible to automate a production operation in stages at comparatively low expense (the System/7 rents for \$525 a month, which makes it IBM's lowest cost computer). The system can be programed to respond to any priority interruption in the par-

ticular process it is controlling. For example, if a signal from a boiler pressure gauge should indicate that pressure was approaching a danger point, System/7 would automatically stop whatever it was doing, send a signal to activate a safety valve, and only then return to its program.

In designing the System/7, IBM spokesmen said, the company had set up a complete simulated factory in one of its manufacturing plants to study and analyze typical factory operations.

The research team had concluded that most factory operations could be broken down into four major types:

1. Man working with simple hand tool,
2. Man controlling machine,
3. Machine run by another machine,
4. Overall factory program meshing all operations and compensating for variations in each.

System/7 can do each

The IBM analysts designed the System/7 so that it could serve each of these distinct types of operation. Thus, for Category 1, man and simple hand tool, the system would serve as a reporting and recording agent; for Category 2, man and machine, it would serve as a monitoring and alarm system, for Category 3, it would act as a guide and controller for the action of production machines; and for Category 4, as a controller accepting the results from other System/7's and meshing their actions in an overall program. IBM conceded that the System/7 is weakest in the fourth category and said that ordinarily where several computers are involved the master computer would be a larger machine than a System/7. But they also said that for a very few operations in a relatively slow-paced production system, one System/7 with large enough memory capacity would be perfectly capable of acting as a master computer.

Male Students Now Want Future Wives' Careers Ensured

Executive recruiters may soon find out that the Women's Liberation Movement is not all karate and bra burning. A survey recently conducted by the management consulting firm of John Paisios & Associates, Chicago, indicates that promising young men will increasingly say to recruiters, "My wife wants to continue her work. What can you do for her?"

The effects of recession and the possible desire to guarantee two incomes were not mentioned.

The management consulting firm interviewed young men and women graduate students. They found a majority of the men felt women were entitled to choose their roles in life and consequently would support their wives' career goals.

While a majority of the men said they would accept job transfers that would benefit their own careers but interfere with their wives', they also said they would ask their employers to aid their wives in finding new and satisfactory job arrangements.

A fifth of the men interviewed said they would refuse to transfer unless their wives approved.

The women graduate students interviewed held significantly higher job expectations than did the wives of successful businessmen, professors, scientists, and engineers interviewed in another study done by the consulting firm. Seventy-five per cent of the women graduate students also indicated they would continue to pursue their careers after they had children.

"We were struck by the extent to which these young women, all of whom already had four years of college, were both ignorant of business custom and unconsidering in their choice of careers," said Miriam Ringo, management consultant. "Most, for example, knew nothing of the widespread practice of large corporations of transferring young executives frequently

in order to broaden their experience and understanding. And most of these young women, in choosing their own field of specialization, had never considered its relationship to the career needs of their future husbands."

Women's higher career goals also seem to be affecting the business machine industry. Anthony Mauro, marketing vice president of Redactron Corp., Hauppauge, New York, said at the opening of the Business Equipment Manufacturers' Show at the New York Coliseum that office machines that can replace workers with secretarial skills are being bought because of a shortage of these employees.

"As business and professional activities increase in complexity, communication of information about them becomes even more vital," Mr. Mauro said. "But the number of skilled hands is decreasing, not increasing. The most promising girls no longer even want to learn the skills involved in secretarial and typing jobs for fear they will be deadended into such jobs."

Mr. Mauro is well acquainted with the high career ambitions some women have; the president of Redactron Corp. is Evelyn Berezin. Miss Berezin designed her first office computer in 1951 and was responsible for the Telefile, the American Stock Exchange computer system, and the first computer airline reservation system, among other accomplishments.

MANAGEMENT SERVICES launches with this issue a new feature, "Management Advisory Services on the Local Scene," which will report periodically on what a small or local accounting firm is doing in the field of management advisory services or how it is building the management advisory portion of its practice. The first feature appears on page 31 of this issue.

Four Guidelines for Top Executives Given By Bank President

"Patterson's Precepts," or four guidelines for the man who sits behind the desk where the buck stops, were outlined by Chase Manhattan Bank President Herbert P. Patterson at a recent forum at the Stanford University Graduate School of Business.

Living with mistakes

"The first precept is, 'If anything can go wrong, it probably already has,'" Mr. Patterson said. "The success, indeed the survival, of a chief administrative officer is determined not so much by the infallibility of his decisions as by his ability to live with the ones that turn sour," he explained.

Patterson's second precept is, "The time lapse between the moment of decision on a policy change and its actual implementa-

HOME STUDY COURSES FOR INDUSTRIAL PERSONNEL

Series of Courses Leading to Specific Vocational Objectives

Vocational Programs Available in:

- Quality Control Inspection-Technician
- Quality Control Engineering
- Quality Control Management
- Reliability Engineering
- Production & Inventory Control
- Quantitative Methods
- Business Management
- Industrial Engineering

TECHNICAL SEMINARS
BOX 671

NORWALK, CONNECTICUT 06852

tion expands in direct proportion to the size and complexity of the company involved." Mr. Patterson explained that sometimes to make progress an organization has to take two steps forward and one step back. "Each part of the organization must get the right word at the right time, and complete coordination is essential. It takes infinite attention to detail and infinite patience," he said.

Self confidence vital

"Self confidence is an essential ingredient of any good bank officer, businessman, or student and should be nourished even when it is occasionally misplaced. From this conviction I formulated my third precept: 'Enthusiasm for your innovative subordinates should increase in direct proportion to the likelihood of the rejection of their proposals.'" Accepting an idea is the highest possible compliment that can be given it, he said. But when an idea is rejected a high degree of respect should be shown for the individual involved so as not to jeopardize the spontaneity and imagination of future proposals, Mr. Patterson advised.

"A fourth and final Patterson Precept: 'If you think you're on top of the job, resign!' I say this because the job of a corporate president evolves so rapidly that it literally defies mastery. If the requirements of the executive's task appear to stabilize, you are simply not meeting them responsibly," he said.

Mr. Patterson recalled that the most difficult executive decision he has made so far as president of Chase Manhattan was when an anonymous caller said a bomb was due to go off within 15 minutes in the bank's main office building. One floor of the building had been bombed out once before in the middle of the night. Mr. Patterson weighed the possible disastrous effects of a sudden, panicky evacuation of thousands of people from the building and the dangerous impact of falling glass as they

People, Events, Techniques

He decided not to evacuate the building. "But I can tell you, gentlemen, that in those next few minutes I learned more about executive education than is contained in anybody's precepts!" Fortunately no bomb went off.

Mr. Patterson told the graduate students, "I earnestly hope that by the time your generation has moved into the controls of business, you will be facing more enlightening and productive decisions than whether to evacuate your office building. I choose to believe that the social commitments that business is making today will bring us to that day of enlightenment even sooner."

Executive Rotation Builds Leadership, Oil Man Asserts

Organizations that expose their professionals to new and different experiences and people facilitate the selection, acceleration, and development of competent leaders, L. J. Weigle, corporate secretary of Humble Oil and Refining Company, Houston, told the annual convention of the Southeastern Association of State Highway Officials.

Instead of just waiting for leaders to emerge, Mr. Weigle recommends organizations rely on an accelerated program of planned managerial development. "The good old days weren't that good. And leaders aren't so much born as they are made," he said.

"People can be accelerated by putting them into unusual situations—for example, by interdisciplinary work assignments (having an engineer work for a lawyer or vice versa in an administrative job). The individuals with the greatest potential should be pinpointed and given challenging, capacity-stretching assignments. The organization can and should pro-

vide the proper climate, the opportunities, the tools, equipment, and facilities for this purpose."

Mr. Weigle pointed out the company can only offer the individual the opportunity but it is up to him to make something of it. "Today's young managerial candidate is extremely fortunate to have come along at a time when the trend in industry has evolved from placement planning to career planning. Under career planning the talented individual has a much better chance of fulfilling his potential—and doing it at an early date."

Principles of program

An effective program of management manpower planning according to Mr. Weigle is based on several principles. Some of those he mentioned were: The program should be oriented toward results rather than procedures in focusing attention on selection and development of talent; at successive levels up the management ladder appraisals of individuals and career plans for them should be made; also, career planning should be projected into the future, to five years' limit for reliability of action and up to ten years' limit for reliability of planning.

Computer Can Solve Pollution Problems, TRW Official Says

The computer's mathematical modeling capability can be used to help solve air and water pollution problems caused by firms processing metals, Robert B. Muchmore, general manager of the software and information systems division of TRW Inc., Redondo Beach, California, told the annual meeting of the American Society for Metals in Cleveland.

Mr. Muchmore told the society that computer modeling could be applied to determine how corrective actions would affect pollution

them. (See M/S, November-December '70, p. 7.) Modeling could also be applied to the problems of improving alloys for jet engines and salt water conversion equipment he added.

The computer can help in bettering understanding of the behavior of materials, Mr. Muchmore said, but the development of the necessary software is expensive. He suggested that a group of interested companies pool their resources to develop software that all can use. This approach is being taken by industry to develop software for computer-aided design using inter-active graphic terminals, he said.

"Once a computer model has been developed, it becomes possible to explore many cases, applications, environments, or hypotheses very quickly and cheaply," Mr. Muchmore said.

New alloys feasible

"Computer models can also help develop new alloys. By such a method we can predict the characteristics of a nearly infinite range of alloys without having to produce and test them physically," he said. The computer can take over some of the tasks of test set-up, test control, and collection and analysis of test data in production testing and in research and development testing, Mr. Muchmore explained.

Minicomputer Miscast In Data Processing, Diebold Study Reports

Enthusiasm for the minicomputers is misplaced when they are considered for information handling in business data processing, a recent Diebold Research Program study concluded. Minicomputers are most valuable in process control functions, the report said.

Attempting business data processing applications is a mistake, the report states, because although the



First Witte Foundation Award winners for the best article "that promoted or exemplified the use of management services in a small CPA firm" that appeared in the magazine in the period July-August, 1969 through May-June, 1970. Left: Dr. Edward L. Summers; right: Dr. Glenn A. Welsch. Both authors are with the College of Business Administration at the University of Texas.

price of the minicomputer is low it is high in relation to the work it can perform. The minicomputers also require peripheral devices, and the cost of their software development is high, the study points out.

Minicomputers can be used profitably as "intelligent terminals" in an overall data processing system—as terminals which can communicate with a larger computer and also have some logical abilities of their own.

The Diebold researchers point out that most present manufacturers of minicomputers do not have much experience in traditional data processing and have little ability to give back-up and support services.

Although the market for minicomputers as stand-alone business data processing systems will not be important, the Diebold study reports, there are two areas in which minicomputers will significantly affect the development of business data processing systems. One will be the use of the minicomputer as "the intelligent terminal." The sec-

ond is the minicomputer as a local processor in a large-scale system, which can offer alternatives to what are now unacceptably high data communications costs.

California D.P. System Now Aids Growers to Extend Crop Season

The California Cannery and Growers' data processing system at first was just an offshoot of the accounting department, but it now has expanded to the point where it can supply the cooperative's members with recommendations on the best varieties of plants to grow in order to lengthen the harvesting season.

William C. Gruber, controller of CCG, one of the nation's largest fruit and vegetable canning cooperatives, said, "We started in data processing six years ago as an offshoot of the accounting depart-

ment. Then we gradually became a little more sophisticated and began producing some management-type reports to give us better control of our brands and types of products.

"During 1968 we started our communications network, which is principally a production control system for our ten canning plants. Last year we developed the communications network even further and put it into full use with the start of the June harvesting season."

Four major functions

The four major functions handled by the system are production control, accounting for 11 per cent of CCC's Honeywell 4200 computer's time; sales and marketing reports, 15 per cent; inventory control, 17 per cent; and order processing, 18 per cent. Twenty per cent of the computer's time is used for computer development work, such as improving the present systems or finding new applications for the computer. The system also handles financial reporting, accounts receivable, general ledger accounting, grower accounting, and field research.

It used to take accountants eight hours to give plant management the necessary reports six to eight hours after the production cycle was completed. The communications network that now links the ten processing plants with the central computer produces reports within minutes after the last piece of data has been entered into the system. The network operates on a real time basis 12 hours a day and permits three plants to communicate with the computer at the same time.

The plants and home office management can receive consolidated production reports from all the plants at the end of each day. "This time difference is very important to our operation because production runs on certain products are very short," said Wayne Floyd, data processing manager at

California Evaporated Fruit Growers. "Previously we did not have enough time to react if we wanted to make changes—changes that were necessary because of the quality of the fruit that was being delivered to the processing plants."

The cooperative is trying to advise its grower-members to raise varieties of plants that will not mature all at the same time. The computer is being used in this field research work to determine growing areas and conditions that are best for each variety. From this planting the cooperative hopes to lengthen its harvesting season.

"By receiving quality raw products, we have a better product when the can is opened by the housewife. We are much interested in controlling the quality of our raw products. By doing statistical research with the computer's help we can direct and advise our grower-members," the controller said.

Free Used Computer Guide Offered by New York Broker

Current price information on used computer equipment is being published quarterly by Time Brokers, Inc., New York. The *Price Guide for Used Computers* is available free from TBI upon request.

Computer "Blue Book"

"The used computer business has come of age, and what we have begun is the 'Blue Book' for computers," said TBI Vice President Joseph W. Kirby. "The information in the *Guide* is based on our complete marketing intelligence operation, and we are now making it available to the public in the hope that it will be of some assistance to both sellers and buyers of computer equipment."

Price Guide for Used Computers is available from Time Brokers, Inc., 380 Lexington Avenue, New York, New York 10017.

Most Business Schools Now Require Computer Programing Course

Sixty-two per cent of the schools which belong to the American Association of Collegiate Schools of Business now require their students to have computer programing proficiency before graduation, according to a recent study.

In 1966 a similar survey found only 11 per cent of the business schools maintained the programing requirement, reports the October *Computing Newsletter for Schools of Business*, published by the School of Business Administration of the University of Colorado, Colorado Springs.

The survey also found that while in 1966 the computer was used to a negligible extent as a problem solver in the functional area courses, in 1970 the heart of the computer curriculum was taught in accounting, finance, production, marketing, and personnel.

In a majority of the more than 100 AACSB schools the computing curriculum has four phases: a required course in computer fundamentals, systems analysis, and design; incorporation of computer applications in functional area courses; computer-oriented business games to demonstrate the computer's aid in decision making; and a course on design and implementation of a computer-based management information system.

Computing Newsletter points out that the business schools have been able to expand their computer curriculum thanks to existing faculty members acquiring a computing proficiency on their own. However, the *Newsletter* also says that the required computing curriculum for most existing doctoral programs in business is "woefully weak."

The publication concludes that the new Ph.D.'s will have to acquire computing proficiency on their first teaching assignment if undergraduate computer education is not to suffer.

Emphasis on Social Problems Will Alter

U.S. Outlook-G. E.

The United States' output mix will shift as the nation moves from a capital investment and defense orientation to a focus on those areas related to solving the country's social and environmental ills, General Electric's *Quarterly Review of Economic Prospects* predicts.

The *Review* is part of GE's MAP-CAST system, a business environment forecasting service. (See M/S, July-August '70, p. 10.)

According to GE's economists, as long as cost inflation persists American management's crucial need will be boosting productivity. "Price relief cannot be counted on to offset rising costs. U.S. manufacturing industry is already vulnerable to overseas competition and getting more so as prices continue to climb," they observe.

"The real test of management and labor will come when the end of the defense spending and investment boom has made its full impact felt upon the durable goods industries and to a lesser extent the non-durable goods industries," the GE experts say.

Consultants' Pay Hit New Highs in 1970, ACME Survey Shows

Salaries of consultants employed by management consulting firms went up more in the past three years than in either three-year period since 1958-61, the Association of Consulting Management Engineers' latest triennial survey of professional consultant staff compensation shows.

From 1967 to 1970, ACME estimates, the average annual salary of consultants in the 46 consulting firms surveyed went up 24.6 per

cent for the period 1964-67 (see news story M/S July-August '68, p. 12) and to about 15 per cent for the period 1961-64 (see news story M/S November-December '64, p. 9).

The figures reported by ACME cover only base salaries. In most consulting firms total compensation of staff consultants is increased by various types of bonus, profit sharing, pension, and insurance programs, but these plans vary so widely among firms that they offer no valid basis for comparisons, ACME says. The salaries surveyed were only those of consulting firm employees; the compensation of partners, officers, directors, and owners was not studied.

Nearly half got over \$19,000

A whopping 47.5 per cent of the consultants in the 1970 survey had salaries of at least \$19,000 a year, compared to 24.8 per cent in 1967 and a mere 1.7 per cent in 1958. None was paid less than \$7,000 a year (compared to 1.9 per cent as recently as 1961), and only 5 per cent had salaries below \$11,000 a year, compared to 9.2 per cent in 1967 and 62.7 per cent in 1958.

The number of consultants with salaries of between \$17,000 and \$23,000 a year went up 43 per cent from 1967 to 1970; the number whose annual salaries exceeded \$23,000 rose 157 per cent in the same period. The median salary would appear to be nearly \$19,000 a year, since nearly half the consultants in the 1970 survey make more than that while fewer than three-eighths make less than \$17,000. More than a quarter of the firms surveyed paid median salaries above \$21,000 a year.

Among the other findings of the survey:

During the inflationary period covered by the study, most of the consulting firms gave annual salary increases to their personnel.

More than two-fifths of the firms reported a standard work week of less than 40 hours. Nearly 30 per

cent had a work week longer than 40 hours.

In 80 per cent of the firms (compared to 66.7 per cent in 1967) consultants were not compensated for overtime work as a standard procedure. Some firms noted that overtime was taken into account in awarding bonuses and/or salary increases.

The principal salary administration problems faced by the firms surveyed appeared to be directly related to inflation: staff pressure to increase expense accounts, salary competition from industry, higher starting salaries for new men with resulting squeezes on the pay of veterans and on profits in a soft economy.

Time Sharing Service Offers Programs for Construction Firms

The construction industry is being offered a variety of computer programs which promise to improve its planning capabilities.

Computer Sciences Corporation has introduced a package of 50 applications programs for builders on its nationwide time sharing service, INFONET. Included in the package are more than two dozen civil engineering, structural engineering, economic, and planning applications developed by Daniel, Mann, Johnson and Mendenhall. Design Systems, Inc., of Boston, has contributed its Architectural Interactive Design System (AIDS).

Also included in the INFONET package is a set of programs that perform three-dimensional structural analysis in both static and dynamic modes, developed by the Canadian firm Swan Wooster Engineering Co. Ltd.

Computer Sciences Corporation, a firm with headquarters in Los Angeles, says it intends to add more than a dozen programs to the INFONET building package in 1971. The major categories of ap-

plications in the engineering field CSC says its package now includes are bridges, buildings, general structures, concrete and steel components, structural dynamics, surveying and highways, and hydraulics and sanitation.

Time Sharing Plan Gives Business Graphs From Computer Input

Business graphs and charts for management reporting can be developed by a computer-controlled plotting system introduced by Graphic Data, Burlington, Mass., the company claims.

According to Graphic Data, the system will provide up to ten graphs an hour for a fixed monthly cost of about \$1,000 and computing costs of about \$30 an hour. The system is completely separate from the user's standard computer service, Graphic Data says, and does not interfere with the regular work schedule.

Albert Spitzak, Graphic Data president, said a low-investment trial rental plan is available which allows a company to evaluate the system before making a permanent commitment to its purchase or lease. The trial plan is a turnkey service which places an operating system at the customer's office and supports it with a remote time shared computer, a computer-based graphic library, and personnel training.

Phone inputs to the time shared computer are located in Boston, Chicago, Hartford, Los Angeles, New York, Philadelphia, and Washington, D.C. Toll-free computer services are also available throughout Indiana, Michigan, Ohio, and Wisconsin, Graphic Data says.

The Graphic Data plotter can be switched to accept tapes from the user's computer, and it can then draw and stack up to 300 graphs on 11-by-17-inch sheets in eight hours, Graphic Data says.

People, Events, Techniques Fall Computer Meeting

Proceedings Now Available from AFIPS

The proceedings of the 1970 Fall Joint Computer Conference in Houston, Texas, are available from the American Federation of Information Processing Societies. The volume contains 658 pages covering the 70 papers presented at 24 technical sessions November 17 through 19. Some of the sessions were "Time Sharing Systems," "Computers and Communication," and "Interfacing Computers and Education."

The price of the volume is \$26. Members of the American Institute of CPAs or other AFIPS constituent societies may obtain the volume for \$13 by sending prepaid orders stating their affiliation and membership number to AFIPS Press, 210 Summit Avenue, Montvale, New Jersey 07645.

New Package 'Automates' General Ledger, Says New York Concern

A software package that its distributors claim completely automates the general ledger has been introduced by Computer Radix Corporation of New York City.

CRC says the INFO-TEM system automatically prepares the balance sheet, profit and loss statement, and condensed comparative statements, including current year vs. last year, budget vs. actual, and variance analysis, among others.

INFO-TEM consists of 35 COBOL programs that CRC claims can be used on any configuration of IBM 360/25-35K core and higher-capacity units with either disk or tape. The system was designed and developed by Omnibus Computer Systems Corp., Forest Hills, New York.

According to CRC President Marshall Greenberg, "Most accounting-related EDP systems were

developed independently of the relationship each accounting function has to the total corporate picture. As a result you find accounts payable and receivable, sales, payroll, etc. as complete systems in themselves, with a high degree of inflexible system design. However, INFO-TEM combines all essential accounting information and important operating data in a consolidated financial report."

Honeywell Shows System Designed for Fast-Food Industry

A specialized management system for the fast-food industry has been developed by Honeywell's Systems Applications Center, St. Petersburg, Florida. TraCom, the modular system, is being tested by two large national fast-food chains, the company reports.

TraCom is capable of providing store managers with current information on sales, cash, inventory, tax, employee time, and other profit and loss data, Daniel C. Durand, marketing vice president for Honeywell's Systems Components Operation, said.

The basic TraCom fast-food configuration consists of a Honeywell H112 minicomputer/processor with a power supply, two keyboard-entry terminals that serve as electronic cash registers, two printers, four cash drawers mounted under or adjacent to the terminal, and a basic software package.

A turn of the store manager's key can convert the terminal from point-of-sale to management mode. In the management mode the keyboard is used for the manager's input, Honeywell says, such as store manager reports or main office reports.

According to Vice President Durand, the TraCom keyboard is capable of fast, error-free order taking and positive cash control with only a minimum of operator training. The customer's order can be

entered by the operator, without regard to prices. Keys are coded to the quantity and menu item ordered. Prices are preset and can be changed only by the store manager, Mr. Durand explained.

The terminal displays to both customer and operator the item price, subtotal, tax where applicable, total, amount paid, and correct change.

Up to a week's sales, inventory, tax, and employee labor information can be captured, processed, and stored in the H112 minicomputer located in an average franchise store, Mr. Durand said.

"With TraCom, store managers who have been spending up to 13 hours a week fighting paper work can return to their primary job—managing," he said.

Management Consultants Can Now be Certified By National Group

Management consultants can now be certified by the Institute of Management Consultants, Inc.

Certified Management Consultants must be U.S. or Canadian citizens, hold an ethical standing in the consulting field, be engaged in public practice, have a college degree or five years' experience, offer a service free of conflicting interests, present recommendations to the Institute from colleagues and clients, and pass an oral qualifying exam.

Once admitted to the Institute the consultant must pledge to abide by the organization's code of professional responsibility or face disciplinary action for violating it.

After 1975 a bachelor's degree plus practical experience will be required by the Institute. For qualification now, five years or more of acceptable public practice in management consulting with three years of major responsibility for projects in one or more specialized areas of managerial competence is

necessary. The Board of Directors of the IMC has not yet decided whether or not management consulting work done in a CPA firm will be considered as public practice in management consulting.

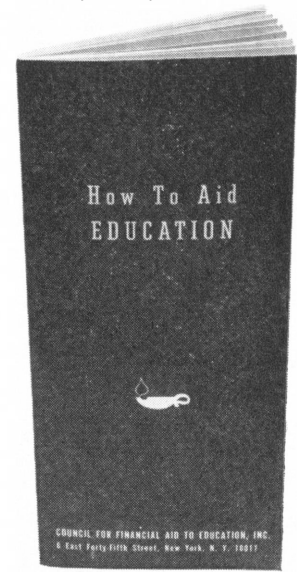
Soon for certification as a management consultant a written test as well as an oral test must be passed. The written examination covers the basic body of knowledge needed for the practice of management consulting, and the oral one tests the applicant's ability to apply that knowledge to his practice.

The Institute of Management Consultants, Inc., was formed in January, 1969, with the help of the Association of Consulting Engineers, Association of Management Consultants, Society of Professional Management Consultants, and New England Society of Management Consultants. The Institute aims to help raise professional standards and improve the practice of management consulting.

Further information about certification may be obtained from the Institute's director, Albert H. Foster, Institute of Management Consultants, Inc., 347 Madison Avenue, Room 1810, New York, N.Y. 10017.

McDonnell Program Will Compute Yearly Cost of Heating, Cooling

McDonnell Douglas Automation Company, St. Louis, Missouri, has developed a program that calculates the annual cost of heating and cooling buildings. The McDonnell Annual Consumption of Energy (MACE) program is available for installation on a customer's computer or for processing on McDonnell's computer in St. Louis. Besides a summary report of monthly and yearly energy consumption the MACE program can produce other reports such as hourly load summaries and system operating variables, the firm says.



THIS FREE BOOKLET WILL COST YOU MONEY.

It tells you why colleges need financial help.

It tells you that tuitions pay only 1/3 the cost of a college education. That somebody has to make up the other 2/3.

It tells you why your company, which benefits from colleges—if not this graduation, then the next one, or the one after that—should pay its share.

We're not only asking you, we're asking everyone.

For your free copy of "How to Aid Education," write to: Council for Financial Aid to Education, 6 East 45th Street, New York, N. Y. 10017.

DOES YOUR COMPANY HAVE AN AID-TO-EDUCATION PROGRAM?



advertising contributed for the public good 