

TRAINING FACILITIES

COMPUTER TRAINING TAILORED TO CUSTOMER NEEDS

When Republic Steel Corp. purchased a process computer system for its Chicago plant, it sent several programmers and its senior maintenance engineer to Honeywell's Process Control Division in Phoenix to take standard programming and systems maintenance courses.

After returning to Chicago, Republic saw the need to train 14 additional employees so the computer system's maintenance needs could be covered around the clock. Because of the number of people involved, Republic asked Honeywell if the training could be done in Chicago.

Honeywell often tailors training programs to a customer's particu-

lar needs, so the development of a course for Republic was no problem. The computer system and equipment were evaluated (no two systems are alike) and an analysis made of what would be required to maintain the system. From that information, Honeywell proposed a seven-week training plan including both classroom and hands-on work. Three different Honeywell instructors took part.

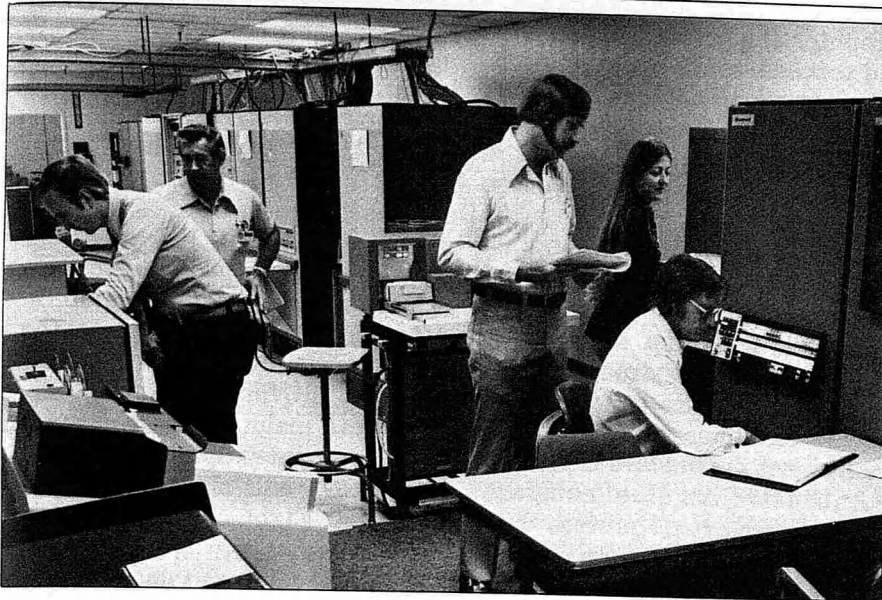
The special Republic course is what Honeywell Training Director Ralph Bechtold calls "customized" training because many computer customers do not require on-site classes. For those customers, the Honeywell division, which provides computer-based systems for

data acquisition, monitoring and control for industrial and electric utility applications, operates a training center in Phoenix. About 300 people per year learn the technical skills of computer programming and hardware maintenance, according to Bechtold.

More than 20 standard courses are offered, ranging from a program on structured software design to system maintenance of the complex HS4400 process computer. The training center also offers a do-it-yourself audio-tape course on process computer concepts, describing the basic components common to any computer. Course materials include an illustrated workbook and four tape cassettes.



Honeywell's Phoenix training center contains 8,500 square feet of floor space divided into six classrooms, offices and a large computer laboratory.



In the computer lab at Honeywell's Process Control Division in Phoenix, instructor Kay Parks (second from right) assists students in debugging a software problem. A Honeywell field service engineer from Germany is seated in front of the computer keyboard.

Courses given in Phoenix cover equipment theory and maintenance, programming and software analysis. Tests are given in all courses to determine the progress of each participant. A written report will be provided on each student if a company requests it.

Tuition for the training classes

includes books, materials and computer time. Other expenses, such as travel and living costs, are the trainee's responsibility.

"We subscribe to the theory that the best training is accomplished by practical application of classroom studies," said Bechtold, *"and we provide computer hardware*

and software products in a laboratory environment for student training."

The Phoenix training facilities contain 8,500 square feet of floor space divided into six classrooms, offices and a large computer laboratory. In the lab are four computers, a wide variety of peripheral equipment and software packages and audio/video devices such as closed-circuit television and tape recorders. The latter are used mainly for individualized instruction.

To maintain credibility and technical competence, instructors install and maintain the hardware and software in the lab. The teaching staff is comprised of 10 instructors, all of whom previously worked in the specialized area they teach.

Students who take the software courses offered by Honeywell should normally be able to implement process control programs by performing computation, logical, real-time and input/output functions. They also are taught assembly language.

Hardware courses feature the operation of Honeywell process

FACULTY



THEODORE F. CLOONAN
Psychologist by training and a consultant in organization and management development through post-graduate study in organization behavior and extensive consulting experience.



JOHN THOMPSON
Coordinator of Management and Organization Development for the Business Extension Division at Virginia Polytechnic Institute and State University.

Sponsored By The OD Division of ASTD

ORGANIZATION DEVELOPMENT

Integrating Your Approach

OCTOBER 10-12, 1978

CHICAGO, ILLINOIS

Arlington Park Hilton

An intensive three-day workshop designed for those who have basic understandings of what OD is and have a familiarity with basic OD techniques and practices.

REGISTRATION

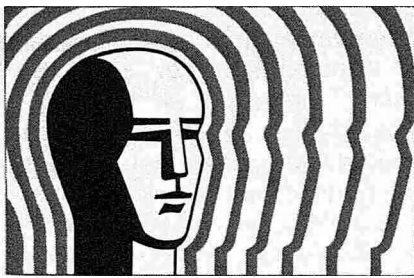
ASTD Members \$150
Non-ASTD Members \$250

Be Sure To Make Your Reservations Early!

For More Information, Just Use The Reader Service Number Listed Below



Circle No. 897 on Reader Service Card



The Du Pont difference in self-study courses is immediate results.

Du Pont self-study courses use proven techniques of programmed instruction, allowing learners to progress at their own pace. Used by over 8,000 companies, government agencies and schools.

VOCATIONAL TRAINING

126 courses—the largest offering in industry—build self-motivation and confidence—practical knowledge for new workers or retraining—such subjects as: carpentry, welding, maintenance, rigging, etc.—no specific background needed.

SAFETY TRAINING

Help prevent unsafe acts, the cause of 90% of all injuries—25 tested courses available for all levels of supervision and hourly employees—includes both safety observation and practices techniques.

The course formats are tested in use. The cost is surprisingly low. Let us send you a FREE list of more than 150 self-study vocational and safety courses.

Contact: Du Pont, Room 36294, Wilmington, DE 19898, or circle our number on the reader service card.

VOCATIONAL AND SAFETY COURSES/ PROGRAMMED INSTRUCTION



Circle No. 884 on Reader Service Card

computer equipment and practices and procedures for maintaining it. Courses present detailed theory on the operation of a computer system and operation and analysis of diagnostic programs. Students who have taken the hardware courses normally are qualified to maintain the computer system they have studied.

Bechtold feels that the training center's particular strength is its ability to customize training for a specific customer when all needs are not met in standard courses.

An Australian steel company bought a Honeywell process computer system and sent two maintenance engineers to the United States for standard hardware training. Because it was developing its own application software development, the firm wanted customized computer training. Honeywell designed a seven-week course around the exact system configuration and sent two instructors to Australia to provide the teaching.

A petrochemical company in Texas decided on a new approach. It wanted its operating people to know how the computer fits into the overall process and asked Honeywell to customize a familiarization course for 60 plant operators. The one-day course was given in three different sessions so that the training would not interfere with the plant's normal operation schedule.

An electric utility, a long-time Honeywell customer, had purchased close to 20 computers over a 12-

year period. That presented a maintenance problem to the utility because it had various generations of computer systems.

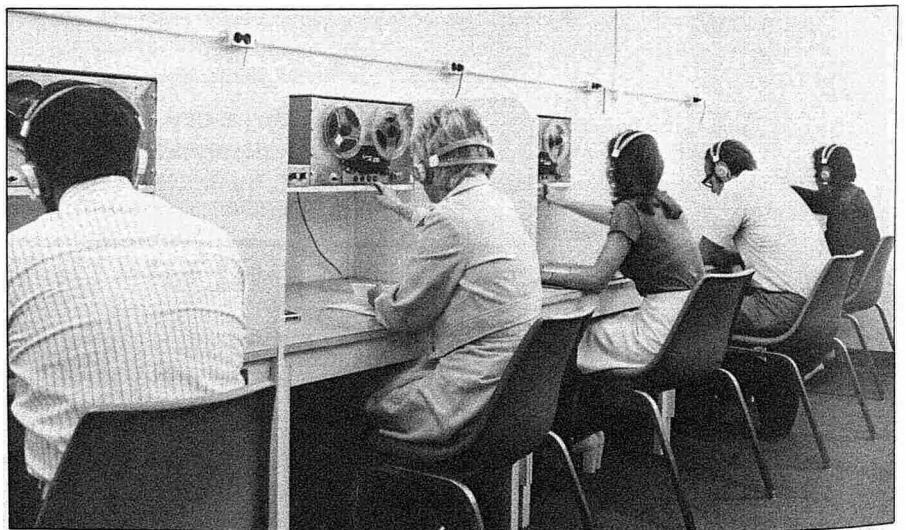
Over the years, utility representatives had taken standard courses offered at Phoenix, some of which were no longer given. New employees thus were unable to learn about the older computers.

A course was prepared to the utility's specifications and was designed to provide the training necessary to maintain the wide variety of computer systems. It took nine weeks and involved two instructors. Eight customer people participated.

A similar thing was done on software. Eight of the utility's software specialists took a month-long course developed to meet that customer's need.

"We're like the insurance company who offers you coverage from the cradle to the grave," Bechtold explains. *"We offer standard training courses or we'll tailor training to the customer's specifications. We'll train our customers in Phoenix at our training center or at the customer's location — and that means almost anywhere in the world."*

"In addition, we offer what we think is rather unique. That is a refresher training program to update skills. We recommend the refresher course about a year after the completion of original training. This is an accelerated course to explain new maintenance techniques and new diagnostic approaches."



Tape recorders are available for individual students to concentrate on self-teaching courses.