The Amateur Computerist

http://www.ais.org/~jrh/acn/

Winter 2018 **A Look at the Start of the Amateur Computerist** **Volume 31 No. 1**

Table of Contents

The Story of the *Amateur Computerist**

The *Amateur Computerist* has been a newsletter covering computers, the internet, netizens and the world they are imbedded in since 1988. It grew out of a battle against the cancellation in 1986 of computer programming classes for hourly workers at the Ford Motor Company Rouge Complex near Detroit, Michigan, USA. The newsletter originally dealt with computer issues and labor issues. By 2018 there were 60 issues scanning 30 years covering computer and internet history, the development of netizens and netizenship and examples of netizen journalism reporting on events of international importance.

The founding meetings of the *Amateur Computerist* were in 1987. Ronda Hauben, Norman O. Thompson, William Rohler, Michael Hauben, and Steve Alexander discussed how to start and what to name the new newsletter. 'Beginning Computerist' was a suggested name. It was argued that the newsletter would be for all lovers of computing not just beginners. An amateur does something for the love of it not for financial gain. The suggestion of *Amateur Computerist* was adopted.

The first issue of the newsletter was published February 11, 1988. It is appended at the end of this issue after page 12 and is available online at http://www.ais.org/~jrh/acn/acn1-1.pdf. It was dedicated to the Flint Sit-Down pioneers. Their 44-day strike (Dec 30, 1936 to Feb 11, 1937) gave impetus to the development of the United Auto Workers (UAW) union. Articles appeared in the newsletter from Floyd Hoke-Miller, one of those pioneers who welcomed the newsletter and the computer, saying, "From the Great Wall to the Great Pyramid, from the hieroglyphics to the screen of the computer, mankind is still progressing." ("Dawn of a New Era," Vol. 1, No. 1) Hoke-Miller told the editors that the Sit-Down pioneers who built the UAW believed that the problems of automation had still to be solved by the upcoming generation.

The newsletter is dedicated to support for grassroots efforts and movements like the "computers for the people movement" that gave birth to the personal computer in the 1970s and 1980s. Work of many people over hundreds of years led to the production of a working computer in the 1940s and then a personal computer that people could afford beginning in the 1970s. This history was serialized in several issues of the newsletter.

The *Amateur Computerist* was described by Andrew Ross and Constance Pawley in their book *Technoculture* (Univ. of Minnesota Press, 1991, p. 125) as follows:

> When worker education classes in computer programming were discontinued by management at the Ford Rouge Complex in Dearborn, Michigan, United Auto Workers members began to publish a newsletter called the 'Amateur Computerist' to fill the gap. Among the columnists and correspondents in the magazine have been veterans of the Flint sit-down strikes who see a clear historical continuity between the problem of labor organization in the thirties and the problem of automation and deskilling today. Workers' computer literacy is seen as essential

not only to the demystification of the computer and the reskilling of workers, but also to labor's capacity to intervene in decisions about new technologies that might result in shorter hours and thus in 'work efficiency' rather than worker efficiency.

In 1993 Henry Hardy wrote: "Interestingly, it seems that most of the material treating the Net from the historical perspective has come from those on the Net itself. Much interesting material has been generated on Usenet and BITNET. In addition, there are an increasing number of electronic journals which have made important contributions, such as the *Amateur Computerist*, the *Electronic Journal of Virtual Culture* and *Computer Underground Digest*."[1]

Articles in the *Amateur Computerist* on the history of the net chronicled the development and spread of computers and then the Internet. The history of UNIX, the ARPANET, TCP/IP and the role of JCR Licklider were highlighted.

More recently, articles in the *Amateur Computerist* have reported on the candlelight demonstrations for more democracy in South Korea and the role played by netizens. In particular, some of these articles are gathered in "Netizens, South Korea, and Participatory Democracy," Vol. 29 No. 2 (Summer 2017) at http://www.ais.org/~jrh/acn/ACn29-2.pdf.

Since its beginning, William Rohler, Norman O. Thompson and Ronda Hauben have been its founding and sustaining editors. Michael Hauben was also a founding editor and gave the newsletter its name. He made substantial contributions during its first 13 years. Jay Hauben joined the editorial team in the 1990s.

In Feb., 2018, the *Amateur Computerist* began its 31st year of continuous publication. The tables of contents and links to all issues can be seen at: http://www.ais.org/~jrh/acn/NewIndex.pdf. As the internet and the netizens continue to mature, the *Amateur Computerist* evolves with them as a window on the world of the net and the netizens.

Note:
1. "The History of the Net," Master's Thesis, School of Communications, Grand Valley State University, Allendale, MI v 8.1.2 September 20, 1993 available at: https://w2.eff.org/Net_culture/net.history.txt

---

*Based on a short history at the *Amateur Computerist* website at: http://www.ais.org/~jrh/acn/acnindex2.html

---

[Editor's Note: The following article gives some background to explain the origin of the *Amateur Computerist* newsletter. The article first appeared in this newsletter in Vol. 10 No. 2 in Spring 2001.]

The 1984-1987 Battle over Computer Classes

This is an historical account of the fight that developed over worker access to computer programming classes at a large auto company in Michigan in 1984-1987. This story contains valuable lessons about the problem U.S. workers face in trying to obtain education in the workplace. These events occurred at the Ford Motor Company's Dearborn Engine Plant.

Schoolhouse in the Factory

The story starts with the massive layoffs in the auto industry in the early 1970s. In response, workers determined that they would fight for shorter hours of work so that more workers could be employed. From 1973-1979 U.S. auto workers won shorter working hours in their contracts in the form of individual days off, called 'paid personal days.' Together with the reduction in hours of work, the auto companies undertook major investment programs to update their technologies. Describing this in a 1994 talk, one Ford management spokesperson explained:

> By the end of 1983 the North American auto industry had spent an estimated $80 billion on retooling and renovating its manufacturing and assembly plants (more money, by the way, than it took to put a man on the moon).
>
> The Dearborn Engine Plant has participated fully in this industry-wide revolution. Over a two and one-half year period, 1978-1981, we spent more than $590 million to transform the plant from an antiquated producer of V-8 engines into one of the most modern four-cylinder engine manufacturers in the world. And the improvements continue. Last month we completed the conversion of our plant

> from a producer of 1.6 liter to 1.9 liter engines…. In 1980, we installed state-of-the-art automation that was hard-line, or not easily adapted for new applications. Since 1980, we have increased dramatically our deployment of robots and flexible automation units. By 1990, we expect to have 70 such units….

Along with this new technology, the 1982 UAW-Ford contract included a paid education benefit for auto workers. Under what was called the Nickel Fund, workers gave up a raise of five cents per hour to contribute to an education fund.

Describing this fund, the same Ford official explained:

> At the Dearborn Engine Plant our education facility includes the UAW-Ford Employee Development Center, which teaches basic literacy skills and high school equivalency courses and the Learning Center, which provides basic and advanced technical training.

A basic reference document for this and subsequent contracts was a University of Michigan evaluation report. The report described the creation and development of the Employee Development Center at the Dearborn Engine Plant, or what was called less officially the Schoolhouse in the Factory. The study explained that Ford workers desired "education" as opposed to "training" and distinguished between the two. Addressing workers' views on education, the report said:

> An analysis of their remarks reveals that no matter how stated, regardless of context, and despite specific topic of conversation, these individuals believe that education (as distinguished from 'training') can liberate them, can enrich their lives, can be the vehicle which will allow them to do and accomplish things they believe are important to them. Education has an irresistible appeal. While many of the participants spoke of the 'utilitarian' implications of education, what was most evident was how deeply they felt about the 'meaning' of education. Education represents an idea, a touchstone which literally has become a matter of faith.
>
> (…) In their remarks, these men displayed a very sophisticated ability to distinguish between 'education' and 'schooling'…. The single statement which perhaps best conveys this message came from a man who is rapidly approaching retirement, 'Overall, I just think it's one of the best things that's happened to Ford's and I've been here 15 years…to have a set-up like this where you can – right here on the job – you can do anything.'

The report suggests that workers enrolled for both practical reasons and broader purposes. It explains:

> Participants describe their reasons for enrolling in such terms as 'I wish to improve myself'…'I'm looking ahead'…. At the same time the participants reported that education is essential for gaining insight into their lives and providing direction for the future. When discussing reasons for participation, the participants invariably indicated that the decision to enroll was a personal choice – an act taken independent of any consideration related to company or union interest in the EDC.'

The fifty percent drop-out rate that occurred at the center was similar to what occurred in adult education across the U.S., but the report states "No one reported withdrawing because of unhappiness with the program or staff or because educational expectations were not being met." Reasons given for choosing the DEP program were "the ease and convenience of continuing their education at an in-plant educational facility. Participants reiterated the theme constantly. Many participants acknowledged that they could have gone to their local public school program and received similar services but it was 'too much trouble.' Being able to go to the Center before or after work or during lunch "was a powerful inducement leading to enrollment."

The report also explained "a clear orientation to learning is present among the participants. While this is not to deny the validity of utilitarian outcomes, most enrollees hold a broader view of the meaning of their participation in the program." Among the reasons for participating was helping children more readily with their homework. Also, "participants sense that enrollment in the program will help them become more flexible regarding future employment and they feel that education is necessary to help them keep up with the changing technology of their jobs."

The report continues, "Participants constantly expressed concerns about the future, about the need to be prepared, to be able to cope with an increasingly complex society and a constantly changing work place. Education was viewed as the basic means for preparing for the future and for sustaining an orderly transition into the future." Referring to the computer classes offered at the Schoolhouse in the Factory, the report explained that "participants in the computer classes are primarily skilled trades workers with at least a high school diploma, and usually some advanced training."

It said, "Participants in the computer classes, while commenting favorably on the class, frequently expressed the opinion that too many enrollees were admitted for the number of computers available...." Concerning the teaching staff, it found that "Participants believe that staff members view and treat them as self-reliant, autonomous adults, – an attitude they frequently contrasted with the way they were viewed and treated in their roles as workers…."

Among the study's conclusions were:

* The response to the computer courses was enormous. It would make sense to have these courses ready to go when a center opens to attract attention….
* More course offerings for workers with higher educational skills. Many of the skilled-trades people we interviewed expressed an interest in further educational programs though the EDC for the same reasons as production people enrolled – proximity, convenient hours, pleasant surroundings etc….

Ford received this evaluation in June 1984. A new contract incorporating these recommendations was prepared to govern the period of September 1984 – June 1985.

The school established under this contract employed a full-time program specialist and three certified teachers assigned to the basic skills program, each working approximately 22 hours per week. Further, a computer programming teacher offered two courses: Computer Literacy I and II.

Although the course title emphasized 'literacy,' these courses were at reasonably difficult levels. For example, after requiring familiarity with BASIC, the course description for Computer Literacy II read: "Topics covered will be…nested for/next loops, one and two dimension arrays, writing programs, on error statement, trace and no trace, bubble and binary sorts, flow charting, math functions, string functions and data types, sequential and random access files, hi resolution graphics and shape tables, an introduction to the Apple's Monitor Mode."

Facilities were small, with one computer room equipped with several computers.

Rouge workers greeted the computer classes enthusiastically. There was much interest in computers, and especially in programming. Popularity was such that workers recommended classes to their fellow workers and the program grew. Interest was sufficient to open summer classes in 1985. Also, workers requested that additional advanced classes be offered, that there be a time when the computer classroom was open outside of class time, and that there be an instructor available in a lab setting so they could come outside of class or if they had to miss a class. Visitors from around the U.S. and the world frequently visited the Schoolhouse in the Factory and the computer classes.

Decline, Resistance, and Shutdown

In Fall 1985 the conditions at the Schoolhouse in the Factory suddenly changed. At first, union and company officials wanted to know what was being taught in the computer classes. The Schoolhouse director showed them syllabi and the class text.

Then the director told staff that they would not be allowed to distribute a brochure she had prepared announcing the computer classes, along with the other course offerings, throughout the Rouge plants. This brochure, called "It's Your Nickel," was only to be distributed inside the Dearborn Engine Plant. She was to create a different brochure to distribute Rouge-wide that could not mention the days and hours when computer classes were to be offered. Further, the union newspaper would include the computer listings at the Dearborn Engine Plant when its new issue came out, at a date uncertain. But the union newspaper appeared with only a vague notice of the computer classes, and several classes were cancelled as a result. From then on until classes ended in February 1987, there was a battle to continue the computer classes.

On May 13, 1986, the following petition was sent to UAW Local 600 office:

Chairperson at the Dearborn Engine Plant:
May 13, 1986

> We, the students of the computer training classes at the Dearborn Engine Plant training facility, have been informed there will be no summer classes and possibly no fall classes.
>
> There are at least 29 people interested in summer computer classes. And as many interested in fall classes.
>
> We, the students of this computer class, would like to know why it is so hard to continue education in computers. We have been experiencing for the past two or three semesters frustration in continuing education and advancement in computer training. When polled about advanced classes, we desire them, but then they are not offered.
>
> We would like to know why they are not offered because we want to continue and advance. (It was also printed in the union paper which led us to believe there were summer classes available to computer students.) We await your answer so that we may register for summer classes when they are offered.
>
> Concerned students of the computer classes, (signed by over 20 students)

Also, computer students wrote, passed out, and posted a leaflet at the Ford Rouge Plant. The leaflet said:

> UAW members have been fighting for 1-1/2 years against attempts to cut out the classes in computer programming held at the DEP. UAW members contribute 17 cents an hour straight time and 50 cents an hour overtime to have these classes available. The most critical point for UAW members is to have training in high technology. How can UAW members be trained in high technology by cutting computer classes out?
>
> We contacted the Chairman in the Engine Plant, and he didn't give any result. We contacted the management officials in charge of training in the Engine Plant. We contacted the President of Local 600, and the officials in charge of the program at Ford Motor Co., and at the UAW. We sent letters everywhere. We are tired of being denied benefits we're entitled to. We're tired of being shuffled from one person to another so as to cover up who we're fighting. We don't know what classes are being offered from one course to the next. We ask for programming in BASIC and they offer PASCAL. We ask for PASCAL to be continued, they offer advanced BASIC. There are no rights to grievance how the monies are being spent. But the letter of Understanding (in the 1984 UAW-Ford Contract) says: "In view of the Company's interest in affording maximum opportunity for employees to progress with advancing technology, the Company shall make available appropriate specialized training programs for employees." But this is not being provided….

Despite the efforts of workers to make the problems known to Ford management and union officials, and despite efforts to protest the ever-worsening conditions via student and staff letters, those contacted refused to investigate the problem. Instead, students and staff faced retaliation threats and job harassment. By February 1987, no further computer classes were scheduled at the Schoolhouse in the Factory and classes ended.

Realizing that computer classes would no longer be available, several students and their teacher decided to wo
rk on a newsletter, the genesis of the *Amateur Computerist*. As our first issue in February 1988 explained:

> This newsletter is to inform people of developments in an effort to advance computer education. Workers at the Ford Rouge Plant in Dearborn, MI were denied computer programming classes. There was an effort by administrators of the UAW-Ford program at the Dearborn Engine Plant to kill interest in computers and computer programming. We want to keep interest alive because computers are the future. We want to disperse informa-

tion to users about computers. Since the computer is still in the early stage of development, the ideas and experiences of the users need to be shared and built on if this technology is to advance. To this end, this newsletter is dedicated to all people interested in learning about computers.

[Editor's Note: The following brief history of the 1936-1937 Great Flint Sit-Down Strike was written for the 50th Anniversary of the victory of that strike. This article first appeared as an introduction to a pamphlet, *The Story of the Searchlight* (Spirit of '37 Press, Flint, Mi., 1987). Online at: http://www.columbia.edu/~hauben/Great_Flint_Sit-Down_Strike_1936-1937/Story-of-the-Searchlight.pdf.]

Lest We Forget: In Tribute to the Pioneers of the Great Flint Sit-down Strike

by Ronda Hauben
netcolumnist@gmail.com

Remember when the 'Sit Down' came?
And all the papers laid the claim
Against each Union Member's name?
"SUBVERSIVE!"
(from the poem "Subversive" by Floyd Hoke-Miller)*

Fifty years ago [eighty-one years ago in 2018], on February 11, 1937, auto workers in Flint, Michigan marched triumphantly out of the factories they had occupied for 44 days. They had endured cold, tear gas, gunshot wounds, injunctions, etc., but they did indeed "Hold the Fort" until GM agreed to grant sole bargaining rights to their union, the UAW. One historian, evaluating the significance of the Sit-Down, writes:

> The era of the New Deal was studded with great strikes, many of them signifying an upheaval of unskilled labor in the nation's mass production industries.
> (Thomas Karman, "The Flint Sit-Down Strike," *Michigan History*, June, 1962, p. 98)

The strike wave of the 1930s made it possible, for the first time to have industry-wide, rather than craft unions in the United States. But to understand the strike wave of the 1930s, it is necessary to look back to its roots in the 1880s.

"There has been labor unrest ever since there was a factory system," points out one commentator, "but the movement referred to [in the 1930s] can properly be traced back to 1886-87, a period of open warfare characterized for the first time by a series of important strikes on the issue of the right to organize and bargain collectively through nationwide unions." (*Fortune Magazine*, Nov. 1937)

The "right to organize and bargain collectively" was the long-sought goal of the labor movement through the fifty year period from the 1880s through the 1930s. That right had been conceded in other industrial countries, while it was bitterly resisted by employers in the U.S.

American businessmen adamantly opposed this right. 35% of the workers in Britain were in unions and 70% of the Swedish workers were unionized in the mid-1930s. But the U.S. nonagricultural labor force had only 18% of its workers in unions. Now in 1987, once again only 18% of the U.S. labor force – down from 37% in 1945 – is unionized [less then 11% in 2016].

The period before and after the Depression of 1929 was one of radical technological change. The auto industry of the 1920s was heralded as the epitomy of the modern world. It was pointed to as proof that the "old-fashioned" features of modern industrial life like trade unions had been "eliminated."

But for workers, the situation was quite different. Ken Malone, a 1937 sit-downer described what life in the shops was like before the Depression:

> We were a pretty good bunch of guys in those days. No Seniority. No Union. No Contract. No Committeeman. No Pay. No Nothing but work, work, work, and more work. There wasn't a war on then, but we worked 14 hours a day, 7 days a week. Absenteeism was unheard of. Failure to report to work cost you your job.
> ("Whadda Yuh Mean, Tough Cookies," *The Searchlight*, Jan. 20, 1944, p. 2)

The assembly line had become the definition of modern labor relations.

With the stock market crash of 1929 came even more intolerable working conditions. Malone de-

scribes the effect of the Depression on his working conditions at GM:

> About this time the depression hit. Thousands...were laid off without any means of making a living…. I well remember the boss coming to me and saying, Ken, production has been cut out two-thirds and we are going to lay off a large number of men and here is the way we are going to do it. The next two weeks we are going to watch all men and see who runs the most production and WE ARE GOING TO KEEP THE MEN WHO RUN THE MOST…. We all speeded up, so instead of 70% being laid off it was 90%. After the lay off we worked about two days a week, but in those two days we did about four days work, for everyday the boss was threatening us if we didn't run more stock. (Ibid.)

By the mid 1930s the economy was recovering, but there were still more than 11 million out of work. The AFL called for a Congressional Investigation into the new technology that management was using to displace workers. The headlines of a typical article in an AFL newspaper during the period read: "Business Recovers, but Millions are Kept Jobless." (*Flint Weekly Review*, Jan. 17, 1936)

Workers were organizing and looking for some mechanism of fighting their intolerable conditions. In 1936 the newly formed UAW sent an organizer to Flint, MI the heart of the GM empire. Wyndham Mortimer wrote a series of articles he sent to workers describing the problems brought about by the rapid technological change and outlining the UAW program. In one article he describes the kind of trouble auto workers were facing:

> In Cleveland 1,000 workers have permanently lost their jobs as a result of the elimination of wood in the all steel bodies. In Norwood, Ohio, 200 men are permanently out of work for the same reason…. There is the ever increasing productivity of the improved machinery that produces prodigiously with an ever decreasing number of workers.

His articles proposed shorter hours, higher wages, and unionization in the mass production industries. ("Mortimer Points Out the Evils of New Machinery," *Flint Weekly Review*, Sept. 18, 1936)

To combat the growing movement for industry-wide unions, companies like General Motors introduced company unions, known as Works Councils. An individual grievance procedure was set up, but workers found the Works Councils, controlled as they were by the centralized power of GM management, powerless.

On Dec. 30, 1936, management in the Fisher II plant in Flint, MI tried to fire three UAW members. Fellow and sister workers stopped work and occupied the plant. The major daily newspaper in Flint reported:

> A sit-down strike in which 22 men are said to have taken part, halted all operations at the No. 2 plant of the Fisher Body Division here this morning...throwing 2,200 men out of work.
> ("Strike Halts Car Assembly," *Flint Journal*, Dec. 30, 1936.)

A sit-downer in the plant remembers the story quite differently. Not twenty-two workers, but everyone he worked with stopped work to join the sit-down. "Everyone of those fellows," he recalls, "had pretty much the same idea and they weren't taught by anybody…. The idea was to stay put and to hold the plant." (Interview with Roscoe Rich, December 30, 1986)

"We were," he stressed, "all different people thinking the same." Roscoe Rich, who was elected the Sit-downers' Chief of Police in Fisher II, explains that before the sit-down strike most of the men working in the plant didn't even know each other's names. But they got to know each other once the sit-down began." "A lot," he explains, "were young guys since GM usually threw a man out by the time he was 40." But he and others felt that working under such bad conditions meant "there were no tomorrows so what have you got to lose."

An anonymous sit-downer, writing in his strike diary, describes the seizure of the Fisher II plant on December 30, 1936 at 6:45 a.m.:

> Men waving arms – they have fired some more union men. Stop the lines. Men shouting. Loud talking. The strike is on. Well here we are Mr. Diary…. This strike has been coming for years. Speed-up system, seniority, overbearing foremen. You can go just so far you know, even with working men. So let's you and I stick it out with the rest of the boys. We are

right and when you're right you can't lose.
(*Holding the Fort: A Sit-downer's Diary*, Spirit of '37 Press, Flint, MI, 1986)

Several hours later, on the afternoon of Dec. 30, workers at the Standard Cotton Products Co., a supplier for GM, sat down. Then around 10 p.m. that night, workers at the big Fisher I plant in Flint took over their plant.

"Thus began the first great auto strike, one of the most dramatic labor conflicts in our history," comments J. Raymond Walsh in his book *CIO: Industrial Unionism In Action*, (New York, 1937) He goes on to document how the impetus for the Flint Strike came from the ranks of the auto workers, in opposition to the leadership of the CIO "The CIO high command," he explains, "preoccupied with the drive in steel, tried in vain to prevent the strike; it was fed by deep springs of resentment among thousands of men against a corporation grossly derelict in its obligations…." (p. 112)

Then on Jan. 3, 1937, 200 UAW delegates from around the country met in Flint to create a Board of Strategy. They elected Kermit Johnson, a rank and file autoworker at the Chevrolet Engine Plant as the head of their strategy committee. The delegates authorized a formal corporation-wide strike and they served GM with a set of the following eight demands:

> First of all, that the representatives of the United Auto Workers and General Motors meet for an industry wide conference to discuss the differences between labor and management; second, that all piece-work be abolished and straight hourly rates of pay be adopted; third, that a thirty hour work week and a six hour workday be established with time and a half for overtime; fourth, that a minimum rate of pay commensurate with the American standard of living be established throughout the corporation's domestic plants; fifth, that all employees unjustly discharged be reinstated; sixth, that seniority rights be based upon length of service; seventh, that the UAW be recognized as the sole bargaining agent between General Motors and its employees; and , finally, the speed of production be mutually agreed upon by management and a union committee in all General Motors plants.

(Thomas A. Karman, "The Flint Sit-Down Strike," *Michigan History*, June, 1962, pages 105 and 106.)

General Motors responded to the strikes with a back-to-work movement called the Flint Alliance (The Flint Alliance for the Security of Our Jobs, Our Homes and Our Community). The *Flint Journal* was filled with news of petitions signed by "happy" workers who wanted the strike ended. (Even in 1987, 50 years later, the *Flint Journal* is still trying to rewrite history, claiming that 91% of the workers in Chevrolet signed back-to-work petitions. See *Flint Journal*, Jan. 9, 1987, p. D1.)

A union newspaper called *The Chevy Worker* was started on Jan. 7, 1937 to counter the company back-to-work movement. One article in the first issue exposed how workers were being forced to sign the Flint Alliance petitions and were threatened if they did not sign. "A petition is supposed to be a voluntary expression of opinion," the article explained, "How voluntary are these petitions that you have had to sign"

> Chevy workers: Glance at a few facts.
> 1. Thursday morning, January 7th, a petition was circulated in Plant No. 5 and those refusing to sign were told that their names would be referred to the office and that they would be ineligible for loans from the company thereafter.

The article goes on to give other examples of supervisors threatening workers to solicit their signatures.

While the petitions were being passed around and forced on workers by supervision, a group of workers meeting outside the Chevy union hall were attacked by some GM supervisors: "Violence has been started in this strike by the company," Chevy workers reported, "We know who the men were…. We are going to name the dirty rats right here and now, so that they can be shunned by all honest men." ("GM Starts Violence," *Chevy Auto Workers*, Vol. 1, No. 2, Jan. 8, 1937)

The police came and arrested not the attackers, but the victims of the attack. Two union men were taken off to jail. The police charged them with fighting with each other. 200 demonstrators went to the jail protesting the arrest and demanding the release of the two. In the meantime, a union member from Fisher I, William Coburn, leaving the demonstration, was hit by a car and died as a result of his injuries.

On Jan. 11, 1937, police tried to cut off food to

the strikers in Fisher II. A battle ensued when the police shot tear gas and shot-gun bullets at the strikers and their supporters who surrounded the plant. "At midnight," reported Rose Pesotta, a CIO organizer who was sent to the scene, "the police tried a second time to force their way into the plant, but were met by a deluge of cold water from a fire-hose and an avalanche of two-pound steel automobile hinges. The cops' line broke under this defensive onslaught. Defeated and shame-faced they left the scene at top speed." (*Bread Upon the Waters*, New York, 1944, p. 241-2)

The victorious battle of Jan. 11 became known as the Battle of Bulls Run, for the police, who were at that time called "bulls", had been routed.

Pesota visited the sit-downers inside the occupied plants and describes how they endured the 44-day ordeal to hold to their goal. She writes:

> Newspapers and periodicals of various political shades, labor papers and mystery magazines were among the reading matter in evidence…. Most of these men had worked for Fisher Body from four to 12

years. They told me it was tough to sit around and do nothing after the speed-up had got into their blood. "But I'll sit here till hell freezes under me," said one. "I won't give up the fight for I know where I'll land if we don't win this time." (p. 238-239)

Each occupied plant had its own governing body to make decisions and to carry out discipline. There was a kangaroo court charged with disciplining violations of the regulations passed. There were sanitation committees, recreation committees, educational committees, among others. "Punch Press", the official strike bulletin of the sit-downers, provided the following description of how strikers organized themselves in the plants:

> The most astonishing feeling you get in the sit-down plants is that of ORDER. Every activity is systematized. Communications are automatic; each striker has his hours of duty, his hours of play and rest; there is an organization set up for every routine problem, plus a lot of other problems; if you want first-aid, it is a department, a subdivision of Welfare; Transportation? That also is a section by itself. Would you beautify yourself? It has a department. The plant has been re-administered. As one striker said, "No matter what happens, this plant will never be the same again!"
>
> ("Punch Press, Official Strike Bulletin," No.7 U.A.W.A. Local #156, p. 1)

By January, 1937 strikes had shut down a large part of GM's operations. Almost all of the company's 200,000 employees were out on strike or were out of work because of the lack of parts. Eighteen plants in ten cities were on strike. Besides Flint, the other cities hit by strikes were Detroit, MI, St. Louis, Mo., Toledo, Ohio, Cleveland, Ohio, Janesville, Wisc., Anderson, Indiana, Norwood, Ohio, Atlanta, Georgia, and Kansas City, Mo.

GM seemed to be getting desperate. There were growing indications that the company was willing to try to use violence to break the strike. Mobs had attacked strikers in Anderson, Ind. on Jan 27, in Bay City, MI on Jan 27, and in Anderson, Ind. on Jan. 28. The sit-downers felt that it was important to go on the offensive. But they understood the need to take into account the presence of company-planted stool pigeons inside the union, as shown through the LaFollette investigation being conducted by Congress. Rose Pesota, explains, "As in war, something unexpected and startling was called for…." (p. 243)

What followed was one of the most skillful strategic plans used by labor in all of American history. Kermit Johnson, the rank and file chairman of the '37 strike strategy committee describes what was done:

> A few of us on the strike committee had met almost constantly for a week on a plan to shut down the Motor Plant of Chevrolet…. Plant 4 was huge and sprawling, a most difficult target, but extremely important to us because the corporation was running the plant, even though they had to stockpile motors in anticipation of favorable court action; GM had already recovered from the first shock of being forced to surrender four of their largest body shops to sit-down strikes. They already had the legal machinery in motion that would, within a short time, expel by force if necessary the strikers from the plants. If that happened, we knew the strike would be broken.
>
> (from "Lest We Forget," *The Searchlight*, Flint, MI, Feb. 11, 1960.)

Kermit Johnson and the rest of the strike strat-

egy committee realized that if they could get and hold Plant 4, they could stop production sufficiently to mortally wound GM. But 100 feet from Plant 4 was the company personnel building which was used as an arsenal for the company police.

"Even the top leadership in the CIO, including John L. Lewis," Kermit wrote, "were seriously worried about the GM situation. When Lewis' right-hand man, John Brophy, approved our plan of action, he did it with great reluctance and a complete lack of confidence. He couldn't conceive of a successful strike in a plant that was less than one-fourth organized."

The strike strategy committee developed a diversionary plan. They held a meeting of carefully chosen union men, but insuring that included was a General Motors' stool pigeon. They convinced the men at the meeting that they would take Plant 9, despite the fact that Plant 4 was the vital plant for Chevrolet production. The stool-pigeon convinced GM that the strikers planned to seize Plant 9. Thus the strikers lured the plant guards away from Plant 4. With the guards gone, the thousands of workers in Plant 4 were able to fight the necessary battles against supervision and company goons to gain control of their plant. And when the police tried to enter Plant 4, they were stopped at the gate by the Women's Emergency Brigade, a paramilitary group of women wearing red tams and red armbands who played a crucial role in defending the sit-downers.

Writers in *Fortune Magazine* in Nov. 1937 were compelled to admit, "Out of all the sensational news of the auto strike, the seizing of Chevy IV was the high point." They saw it as an "illustration of labor's growing initiative...it serves as a landmark," they acknowledged, "measuring how far labor had traveled in less than three years and through some 4,000 strikes."

On February 11, 1937, sit-downers emerged from their occupied factories and joined a long parade through the streets of downtown Flint. General Motors had been forced to sign a one page document conceding to the UAW the basis to become the sole bargaining agent for the auto workers.

The sit-downers went back to work by Feb. 18. They found that GM had not changed. To the contrary, the LaFollette Committee hearings document how GM management singled out union people and threatened or tried to fire them when they returned to work after the Feb. 11 victory. In Chevrolet, Arnold Lenz, the anti-union plant manager, marched 1000 men armed with clubs through the plant. And the workers fought back, sometimes with slowdowns, sometimes with sit-down strikes as their way to resolve grievances or settle injustices. For example, later there were sit-downs at Plant No. 4 and No. 8 in Flint on March 6 when 6500 workers sat down, and on March 8, 500 workers in Plant 4 sat down. (Sidney Fine, *Sit-Down*, Ann Arbor, Mi, 1969, p. 322)

Floyd Hoke-Miller, a sit-downer in Plant 4, sums up the victory of '37. "We didn't win the war, but we developed the unity to fight the coming battles."

The sit-downers of `37 went on to lead the fight for the contractual rights workers have today: seniority, a grievance procedure, vacation pay, COLA, pensions, 30 and out retirement, medical insurance, etc. The story of how they won these gains is even less known than the little known story of the Great Flint Sit-Down Strike. But the story is a tremendously important one.

The Chevy Worker, the newspaper started by the Chevy workers on Jan. 7, 1937 to name the "dirty rats...so that they can be shunned by all honest men" became the precursor of shop papers put out by UAW locals across the country.

The newspaper put out by the Plant 4 sit-downers, was called *The Searchlight*. It was subtitled, "The Voice of the Chevrolet Worker." In testimony before the War Labor Board in Washington, GM's Director of Labor Relations complained, "We always had a tough bunch of cookies up at Chevrolet-Flint to deal with. That was the breeding ground for the sit-down strikes…. It is this same group of people," he went on, "that we thought that through the evolution of labor relationship...would probably be changed and improved." He lamented, "They are now back in the saddle and one very interesting paper (*The Searchlight*, official local publication) they got out recently is directed at 'Herr Thomas' [Pres. of the UAW]. So the worm has turned and they have got their own union officials, some of whom they dislike, to replace us in the news." (*The Flint Journal*, January 7, 1944)

In response, George Carroll, the first editor of *The Searchlight*, explained, "We have criticized (not attacked) R. J. Thomas [Pres. of UAW] and Phillip Murray [Pres. of CIO] and shall continue to exercise the right to criticize as long as they pursue a policy we feel to be detrimental to the best interests of the membership of this Local."

Floyd Hoke-Miller, co-editor of *The Searchlight*, replied in verse to the labeling the Chevy workers as "tough cookies":

You can't be nice to human lice
That feed upon your blood,
And boast with pride about their side
A liftin' you outta the mud.
(from "Tough Cookies: With No Apologies" by Floyd Hoke-Miller.)

In 1987, all of the gains of the past 50 years won by the hard efforts of the sit-downers and the workers who followed in their footsteps, are under attack. And the sit-down pioneers are still being treated as "subversives." UAW union officials have vetoed any appropriate commemoration to mark the 50th anniversary of Feb. 11 in Flint or elsewhere in Michigan. But if the history is known of what was won and how, there will be the basis to carry on the proud tradition of Feb. 11, 1937.

---

*Excerpts of poems are from a collection of poems by Floyd Hoke-Miller, *A Laborer Looks at Life: Then and Now*, Flint, MI, 1984.

[Editor's Note: The following two poems about the Flint Sit-Down strike were composed by auto-worker/poet Floyd Hoke-Miller (1898-1990). They are reproduced from the collection *A Laborer Looks at Life: Then & Now* complied by Ronda Hauben (Spirit of '37 Press, Flint, MI, 1984). Available at: http://www.columbia.edu/~hauben/Great_Flint_Sit-Down_Strike_1936-1937/LaborerLooks.pdf]

Subversive

by Floyd Hoke-Miller

Remember when the "Sit Down" came?
And all the papers laid the claim,
Against each Union Member's name?

"SUBVERSIVE!"

'Twas then the 'Big Shots' howled with fear,
"The revolution now is here;
The stand they take is naught but sheer."

"SUBVERSIVE!"

You worked in chains that galled your pride,
And when you tried to save your hide,
The "Bulls" and "Bears" stood up and cried:

"SUBVERSIVE!"

The economic ills you feared
And increased crops of "Stools" appeared
But when you called their hand they jeered:

"SUBVERSIVE!"

Note: "bulls and bears" refers to stock market investors.

Were You There?

A Saga of the Flint Sit-Down Strike

by Floyd Hoke-Miller

Were you there when they hung
the GM goose,
When the tear gas rained
and hell broke loose
In gushing blood, in broken bone
and mad mayhem?
Did you hear the toilers scorn
a gallowsed effigy
In heartfelt words about the
sour apple tree
And see a union born all
because of them?

Were you there when slavers ran
like frightened rats
And flounced in the fracus like
blinded bats,
When workers pulled the power
and shut the Chevy down
Did you observe the company's
strong armed thugs
When they showed their traitorous,
turncoat-mugs
And made the hand-made hickory
stick renown?

Did you hear the shrilling
screams of angry wives

That dared the slugging blue
coats with their lives
And stormed the streets outside
the factory gates?
Did you see them break the windows
glass by glass
And let escape the blinding,
strangling force of gas,
In fighting female fury to succor
endangered mates?

Note: During the 1936-37 Sit-down in Flint, there was a song popular among the strikers, "Hang Old Sloan to the Sour Apple Tree" which was sung to the tune of "The Battle Hymn of the Republic." The "goose" in this poem refers to the effigy hung out the window of their occupied factory by the Sit-Downers. Alfred P. Sloan was the President and chief executive of GM from 1923, including at the time of the Sit-down strike.

The opinions expressed in articles are those of their authors and not necessarily the opinions of the *Amateur Computerist* newsletter. We welcome submissions from a spectrum of viewpoints.

ELECTRONIC EDITION
ACN Webpage:
http://www.ais.org/~jrh/acn/
All issues from1988 to present of the *Amateur Computerist* are on-line at:
http://www.ais.org/~jrh/acn/NewIndex.pdf

The following nine pages reproduce the first issue of the *Amateur Computerist*, Vol. 1 No. 1, issued Feb. 11, 1988. It is included here in celebration of 30 years of continuous publication.

The Amateur Computerist

February 11, 1988 volume 1 no 1

INTRODUCTION

This newsletter is to inform people of developments in an effort to advance computer education. Workers at the Ford Rouge Plant in Dearborn, MI. were denied computer programming classes. There was an effort by administrators of the UAW-Ford program at the Dearborn Engine Plant to kill interest in computers and computer programming. We want to keep interest alive because computers are the future. We want to disperse information to users about computers. Since the computer is still in the early stage of development, the ideas and experiences of the users need to be shared and built on if this technology is to advance. To this end, this newsletter is dedicated to all people interested in learning about computers. We welcome articles, programs, reviews, etc. We want this newsletter to help people use their computers in ways that will be useful and fun.

Table of Contents

The *Amateur Computerist* invites contributions of articles, programs, etc. Send submissions to:

R. Hauben
P.O. Box 4344
Dearborn, MI 48126

Additional copies of this issue are available for $1.00 each. Send check or money order to above address.

DAWN OF A NEW ERA

From the Age of Darkness to the Age of Enlightenment — from the Machine Age to the Mind Age, here we are. Let not any force or forces keep it under wraps. Let it be free to circulate in the Public Domain. Let us base it upon principle, not on price, like Truth or Love. From the Great Wall to the Great Pyramid, from the hieroglyphics to the screen of the computer, mankind is still progressing. So make the new born science that has given us the computer for the amateur and not as a prerogative of the professional to be shrouded in secrecy from humanity, the choice of the individual, not an election of a minority. From the falling star to the falling apple, from the minute to the multitudinous, from secrets to disclosure, I am pleased to endorse the amateur method. Therefore I implore all to plan and to participate even though I have been on disability for 26 years and have not had the opportunity to participate in the great sea of knowledge that has flowed

over the Dam of Secrecy since I was activated physically and mentally — in my advanced years and state of general debility I still see the mind of man as the greatest computer of all — So Let Us Continue to Make Use of It to the Advantage of the Masses — Come, Let Us Reason Together. With an open mind and a free spirit, let me reiterate, there is so much more to know, that what we do know, is still insignificant. It gives me great pleasure to endorse this free-for-all program of a restless mind.

Floyd Hoke-Miller
UAW Retiree and
Flint Sit-Down Striker

DEDICATION

This first issue of the *Amateur Computerist* is being published on February 11, 1988. This date was chosen so that this issue could be dedicated to the Flint Sit Down pioneers on the victory of their battle to win industrial unionism 51 years ago.

Floyd Hoke-Miller, whose article "Dawn of a New Era" appears elsewhere in this newsletter, was a sit-downer in Plant 4 in Flint, MI during the Great Flint Sit-Down Strike. He continues to participate in the battle for industrial unionism and for the progress that industrial unionism has brought to this land.

Another pioneer of the Flint Sit Down Strike, Jack Palmer, when he retired, wrote an article in his union newspaper in which he tried to sum up the gains and unresolved problems that the sit-downers had left behind them. He wrote, "Each generation has to solve its own problems. The sit-down generation solved the problem of organization. The postwar generation solved the problem of pensions and inflation. Not entirely, but a good start was begun. The present generation is faced with the greatest problems of all. They are Automation, Peace and Politics." (From "The Searchlight"((newspaper of UAW Local 659, Flint, MI), April 21, 1960, pg. 2).

The *Amateur Computerist* is an effort to encourage discussion on the problem of Automation. Microcomputers are now an important fact of life. They are new. The first microcomputer design was announced to the public only 14 years ago. (It was the Mark-8 by Jonathan Titus featured on the cover of the July 1974 issue of *Radio Electronics*.) Today, personal computers are everywhere. They are affecting and changing homes, factories, offices, etc. They are revolutionizing all fields of knowledge. Therefore, it is crucial that computers not be kept from people — that knowledge about computers is available to amateurs as well as professionals.

In a book written shortly before the invention of the personal computer, Ted Nelson warns against allowing a computer priesthood to develop. He writes, “Knowledge is power and so it tends to be hoarded. Experts in any field rarely want people to understand what they do, and generally enjoy putting people down.”

"Thus if we say that the use of computers is dominated by a priesthood, people who splatter you with unintelligible answers and seem unwilling to give you straight answers, it is not that they are different in this respect from any other profession. Doctors, lawyers and construction engineers are the same way."

"But," he goes on, "computers are

very special, and we have to deal with them everywhere and this effectively gives the computer priesthood a stranglehold on the operation of all large organizations, of government bureaux, and anything else that they run…."

"It is imperative," he concludes, "for many reasons that the appalling gap between public and computer insider be closed. As the saying goes, war is too important to be left to the generals.... Guardianship of the computer can no longer be left to a priesthood.... Indeed, probably any group of insiders would have hoarded computers just as much.... But things have gone too far. People have legitimate complaints about the way computers are used, and legitimate ideas for ways they should be used which should no longer be shunted aside." (From *Computer Lib*, pg. 1-2.)

Thus to deal with the problem of automation, it is necessary for people to be familiar with computers, to use them, and to know their capabilities and limitations. To that end, this newsletter is dedicated to continuing the work begun by the Flint Sit-Down Pioneers.

The World of Telecommunications

Do you want advice about which programming language is worth learning? Are you interested in a discussion on why the shuttle blew up? These and many more questions were recently discussed on a computer bulletin board system (BBS. BBS's are part of the world of telecommunications.)

For example, there is an on-line computer magazine on the BBS "Chess Board." In an article on "Telecommunications: The Interactive Process," the writer explains: A bulletin board system (BBS) is a privately owned and maintained computer based communications system. A person, or sometimes a group of people, have invested computer, data storage, telephone lines and bills and much time into giving others a means for communicating with another with their computers. They each have their own reasons and goals for investing hundreds or thousands of dollars and hours to this activity."

Another article on "Chess Board" points out that each bulletin board has a purpose. It can be a fun board, with puzzles and games, it can be a board whose purpose is an exchange of ideas with discussion formats which include debates on various issues like current events, world affairs, etc. It can be a board that will let users exchange software through uploading and downloading programs.

Following are listed just a few of the many BBSs in the Detroit area - (or if the number has a one before it, in this case, it is because it is in the Ann Arbor area.)

Genesis II (291-2520) Has lots of files to download.

PC Playhouse (381-8633) Mostly IBM compatible information.

Starship Enterprise (843-1581) Can ask for prices on computer equipment.

Chessie's BBS (291-2160) Good discussion.

Trading Post (882-7104) In general good board.

The Outpost (277-1513) Good for downloading programs.

General Store (728-2863) Good for downloading.

M-Net (1-994-6333) Lots of lively, informative discussions, and can have on line conversations.

If you want to call Ann Arbor,

you can call thru MERIT so it isn't a toll call. An article on using merit will follow in a future issue if there is interest.

Along with BBS's in one's local area which are usually available free of charge, there are also commercial services like Compuserve or the Source. They bill users a fee for the time on line.

Another user sums up the value of telecommunications: "You exchange ideas, you discuss, you might not see these people, but you have connection with them thru the modem so if you're stuck at home, you're still out in the world. You exchange ideas, message programs, etc. You reach a whole community."

TRY THIS

This is a graphics program for IBM PC & compatible machines.

```
5  REM Trythis.bas
10 KEY OFF:CLS:SCREEN 1
20 X=4*RND:Y=4*RND:IF X=Y THEN 20
30 COLOR X,Y
40 FOR A=-120 TO 120 STEP 4
50 FOR B=0 TO 1
60 LINE (160,100)-(A,199*B),RND*4
70 LINE (160,100)-(319-A,199*B)
80 NEXT B
90 NEXT A
100 FOR D= 1 TO 5
110 FOR C=1 TO 23
120 COLOR 4*RND,4*RND
130 CIRCLE (160,100),5*C,4*RND
140 NEXT
150 NEXT
160 FOR E=1 TO 10
170 PAINT(160,100-E*2.5+2),RND*4
180 NEXT
190 LOCATE 13,17:PRINT"THE END"
```

The Future Belongs to Programmers

An article in the Jan/Feb.1988 issue of *Computer Update*, the magazine of the Boston Computer Society, explained that Microsoft is recommending that computer users learn to program in BASIC. Microsoft sponsored a two day seminar in the state of Washington in October, 1987 for representatives of big computer clubs. Microsoft was expected to introduce some of its new products. Instead, to the amazement of many, Microsoft used the seminar to explain the importance of learning to program. "Microsoft today is bustling with activity...Oddly enough, Microsoft chose not to talk about any of these activities with the user group community. Instead, it focused all of the sessions on its work on programming languages," reported the Boston Computer Society representative.

The article goes on to explain, "Microsoft believes the future belongs to programmers. Although programming languages were once thought to be relics of the early days of personal computers, they are enjoying tremendous growth today. As users become more sophisticated, Microsoft believes, they will eventually find themselves needing performance and specialized functions that only a programming language can provide."

The article quotes a Microsoft engineer, "In the future, everything should have programmability." The User Group Representatives were further surprised by another development at the conference. Not only did Microsoft stress the importance of programming, they also stressed the importance of the BASIC programming language. The writer noted, "Most serious programmers consider BASIC an obsolete language." The

writer went on to cite the slowness and lack of sophistication of BASIC as the reason. "More and more" programmers "are opting for C as their language of choice," he explains.

But not only is BASIC available on more personal computers than any other language, it is also easier to learn than any other language. "For this reason," the article explains, "Microsoft sees BASIC as "the language of programmability for the future."

Bill Gates, Chairman of Microsoft, is quoted as recognizing "the need for a `universal macro language' for personal computers." The article goes on to suggest that "This language would allow users to write procedures that work on all different application programs and operating systems. (It could, for example, permit you to write a macro in 1-2-3 that called up a program in dBase III and then transferred information to PageMaker.)"

The article sums up the conference, "Although the presenters did not say so directly, they implied that Microsoft was working to make BASIC the basis of this universal micro language." The result would be that BASIC, "then could become the Esperanto of the applications software world."

Augusta Ada Byron
(1816-1852)
The First Programmer

Augusta Ada Byron
(1816-1852)
The First Programmer

WHY LEARN PROGRAMMING

Three years ago there were classes in computer programming (in BASIC) at Ford's Dearborn Engine Plant and at Ford UAW Local 600. Also, there were classes in programming in BASIC at many local public schools. Now, in 1988, computer programming classes are gone from the Ford Rouge Factory and there are fewer or none left in local public schools. For example, there are no longer classes in programming in BASIC in the Dearborn Public Schools. Thus there has been a substantial change in computer education both at the workplace and in the public schools. Why has this change occurred? Also there were public moneys, from both the Federal and state government allocated to provide for these and other classes. When public funds are involved, there are a set of regulations to be followed so there can be public scrutiny of what is happening with the money. The money is still being provided but the classes are gone. What has happened?

Over the past three years UAW members at the Ford Rouge Plant made clear that they were interested in learning computer programming. The personal computer is a young technology. It's only beginning to be developed in terms of uses at home. More people have computers in their homes now and they want to be able to use them for things they previously had done on paper. Most software is not customized to the individual. If you have knowledge of

how to program, you can make the software meet your needs. For example, on IBM compatible machines, you can write BATCH programs which will help you use your application programs more efficiently. You can use the computer even when there is no commercial software for the task you want to accomplish. Also, it is much harder to use store bought software when you are not familiar with programming skills. By learning to program you learn how the computer works so you aren't intimidated by it. And personal computers are being used in more and more workplaces, which makes it doubly important to be able to get the computer to do what it is needed to do.

It is not only that people need to know the computer to be able to do their job. It is also that the computer needs to be developed in the workplace. The workers who operate computers will need to develop the uses of the computer and will have to be able to get them to work. Our times are like the early days of the industrial revolution when machines were first introduced into factories. Workers needed to know the principles of physics, mathematics etc. to be able to get the machines to function properly. But the factory owners were afraid of educated workers. They wanted workers who were obedient and passive and resigned to their conditions. Thus, it became necessary to set up special technical schools for workers called Mechanics Institutes to make this technical knowledge available to the workers who needed it. And when those schools finally were set up, there was a sharp struggle as to whether the factory owners or the workers would determine the content of the classes offered.

Herman Goldstine, in his book *The Computer from Pascal to vonNeumann* (1972, N.J., p 32) offers an account of the problem workers faced being denied technical education. He writes:

"This exclusion was going on just at the time when the Industrial Revolution was making education ever more essential for all members of society. In 1823 George Birkbeck (1776-1841) founded his first Mechanics' Institute in Scotland, and similar institutes spread into England under the patronage of Henry Brougham (1778-1868). These brought to the workingman the advantages of technological training just when it was most needed in England...for example, Stephenson, the inventor of the locomotive, was a poor boy who taught himself to read when he was seventeen." (p 32)

A similar but more subtle exclusion from technical education has occurred at the Ford Rouge Plant. Company and union officials say that the union is teaching computers at UAW Local 600. Originally there were computer programming classes at Local 600. They were taught by teachers from Henry Ford Community College. But suddenly those classes were ended, and a private subcontractor was brought in to teach computers. The new classes, however, were no longer classes in computer programming. They were classes in how to use a certain word processing program, or how to use a particular spreadsheet program. Why were the computer programming classes designed by Henry Ford Community College teachers ended at the union local? Why were computer applications substituted for computer programming in the classes at the union hall? And why were these classes then used to cut out classes in computer programming at the Dearborn Engine Plant? The computer programming classes at the Dearborn Engine Plant were part

of the pilot program set up in early 1984 under the UAW-Ford contract. Computer literacy classes which included 60 hours of computer programming instruction were made available as part of this pilot program. The classes were supposed to be available as adult education classes run by a local school system. And there was State and federal funding supplementing the class offerings. A Professor from the University of Michigan who wrote an evaluation of the program in Spring, 1984 said that the computer classes were the most important aspect of the program, and he recommended that whenever other programs be set up, they include computer offerings. His evaluation was used to justify further funding from the State of Michigan and the federal government. These funds required all workers at the Rouge be notified of all the classes that are offered at the Dearborn Engine Plant. Yet in Fall 1985, the computer classes were removed from the brochures advertising the classes available at the Dearborn Engine Plant. And then some of the computer classes were cut out. When UAW members tried to inquire about why this was happening, they were told that there were computer classes at the union hall.

But the federal funding required that the contract signed by Ford and the UAW to provide computer literacy classes at the D.E.P. be maintained. And the D.E.P contract also stipulated that there would be advanced computer classes offered at the D.E.P. Yet when U.A.W. members tried to register for these advanced classes, they were told that they wouldn't be available. They were told they could take classes in computer applications at Local 600. Why was such an effort made, despite federal funding requirements, to cut out the computer programming classes at the Dearborn Engine Plant?

First of all, it is said that workers won't have to program a computer, they will only have to operate it. Thus computer classes need only teach how to run a commercial computer program. But the computer is not a word processor or a spreadsheet or a data base machine. Almost any personal computer can be used in a variety of ways. It can be used for word processing, to run a CAD program, to run a spreadsheet. It can be used to run programmable controllers or robots. It can be used to do typesetting. To learn a particular application is not necessarily helpful in learning the flexible nature of the computer. The personal computer is an all purpose machine. It has only begun to show its varied potential. But to utilize this machine, you have to understand how it works and how to get it to do what you want. Thus you need to know how to program it.

In the 1930's, some auto workers in Flint, MI, had lathes in their basements so they could become familiar with the operation of the machine and be able, therefore, to get it to do what was needed at work. The same goes for the personal computer. The more you use it at home, the more you will be able to understand how it functions and be able to use it at work. Some U.S. corporations seem to believe they can control the computer, so they are keeping workers and schoolchildren from learning programming. One company officials told a mother his company didn't want people learning programming. They would teach whatever someone needed to know. Also supervisors have said they don't want workers typing in programs, tying up the machines. And maybe it is feared that if workers learn to

program they will change the operation of a machine. But are these fears realistic?

First of all, the computer is new. People using computers will be running into new, unknown situations. Management may claim they don't want workers trying to deal with these situations, they want PRODUCTION. There are salary programmers. But they can't write everything that needs to be written, because they can't do all the customizing that is needed. To get production, management will need workers on the shop floor who are able to solve the day to day problems that occur in the course of operating the computers that are being installed on the shop floor.

In the pre-computer era, someone running a Keller machine needed to know what cutters to use in what areas, what direction to run in, how to set the job up, the size of the tracers, which cutters to use for certain areas, when the job was done, etc. It was only practical experience that made it possible to run the machines. Then numerical control machines were introduced, which run with paper tapes as programs. They are often programmed by salary programmers at another location. But if the cutter gets dull or hits screws and dowels, or there's too much stock or no stock (for example you can't take off 4 inches of stock at one time as you would break the cutter) then the operator has to intervene in the program and override it. Kellers, now, are run by direct numerical control, rather than by paper tape. In the past, there wasn't enough memory storage to store the whole program at one time to be able to edit it. Now the operator can load the whole program into the machine at one time to run it. If the operator finds something is wrong, it is now possible to edit the program and correct the error. Therefore, it increases efficiency for the operator to know how to program the machine. Also, it is more likely a worker who doesn't know programming will make some mistake that may interfere with the program in a machine, while one who knows how the machine operates and is equipped to solve its problems may actually improve the situation. It is workers who keep machines running, and they need certain necessary knowledge to be able to do their work.

Learning BASIC can be an easy introduction to how a computer uses programs. It also makes it possible for a beginner to write simple programs. If someone doesn't know BASIC or another programming language, he doesn't know what a computer can do. He doesn't know if the computer is capable of adding, subtracting, or how it does it. If he runs into trouble, he has no idea why. Someone who has learned a little BASIC programming, however, knows that a computer can do calculations. He understands how a program can get stuck in a loop. And if he needs to go for some kind of specific training, for example, for robotics training, or numerical control training, he has a background that helps because he already knows what a program is. He might be learning another programming language, but he doesn't have to start from scratch.

Learning to program a computer can also help to demystify the computer. It can give someone confidence in using the computer because the person knows he can control the outcome by changing a few commands. Also, he has accurate knowledge of how the computer functions. Thus he can deal with the unexpected and the problems. One of the pioneers in the development of the personal computer, David Ahl, observed that there is great misunderstanding about the kind training required to develop the technology of the per-

sonal computer. "We are dealing with one of the most important concepts and tools developed by man," he says,"and yet some continue to hope they can check it off as they do driver education or typing." (*Creative Computing*, Nov. 1984, p.16)

The cover of *Personal Computing* announced the Pet Computer October, 1977

COMMODORE TIPS & TRICKS

BLOCKS FREE

If you would like to know how many blocks are free on a disk, enter: LOAD"$$",8. Then LIST. The result will display the blocks free on the disk but not the directory.

DIRECT MODE DISK-ERROR READER

The next time you need to read the disk error channel, try this line in direct mode:

```
OPEN 1,8,15: POKE 58,0: {about 20 spaces} INPUT #1,A$,B$,C$,D$: PRINT A$,B$,C$,D$ : CLOSE 1
```

EASY LOAD AND RUN

Type: LOAD"filename",8 {shift and run-stop keys}

SHORT FILE-READER

Here is a one-liner for reading sequential files. Change "filename" to the name of your sequential file and type in RUN:

```
2 OPEN8,8,8"filename" : FOR I = 0 TO 1 : GET#8, A$ : I = ST : PRINT A$;: NEXT : CLOSE 8 : END
```

NEW FIRST FILE

This program will let you swap the first file in a directory with any other file on the disk:

```
  10 INPUT "name of current first program"; F$
  20 INPUT "name of program to be first"; P$
  30 PRINT "validating disk" : OPEN 15,8,15,"V0"
  40 PRINT "swapping files" : F1$ = F$+"." : P1$ =
       P$+"."
  50 PRINT#15,"C0:"+F1$+"=0:"+F$ : PRINT#15,
       "S0:"+F$
  60 PRINT#15,"C0:"+P1$+"=0:"+P$ : PRINT#15
     , "S0:"+P$
  70 PRINT#15,"R0:"+P$+"=0:"+P1$ : PRINT#15,
       "R0:"+F$+"=0:"+F1$
  80 CLOSE15 : PRINT"{ 2 curser downs} all done!"
```

STAFF

Steve Alexander
Ronda Hauben
William Rohler
Norman O. Thompson