t takeoff of space age computers in industry

data processing

d, "The business
red the information
during the last 20
ing that time data
pacity has doubled
ars coupled with a
osts." Like other
usinessmen he said
e computer will be
e future for large
all businesses and
nagement.
ined many of the
ations of the com-
use. First, he said,
st understand a
not a mystical
only a tool that can
e amount of in-
l summarizes the
accurate fashion.
gested the first
farmer must ask
a computer in-
ill the computer be
in my operation?"
rmer must realize
mitment needed to
computer system
stressed.
of microcomputer
brought a new tool

to the farm. However, this new machine has a foreign language that needs defined.

"Hardware" in computer language means the physical piece of equipment that one can look at, touch and move about. Barton stated that the typical farm

Stray electrical voltage is a main concern of speaker Steve Spencer, Penn State Extension dairy specialist.

microcomputer system consists of a printer for report printing, a "central processing unit" (CPU) to manipulate the data, disk drives for storage, a typewriter keyboard and television screen (CRT) for entering and reviewing data.

"Hardware" is a useless tool by itself, explained Barton. Like a tractor it is not a useful tool until an implement is attached to it. This needed implement for the computer is called "software".

"Software" is a set of instructions called a program stored on a disk or tape that the processing unit uses to add, subtract, multiply, divide, sort and print information the operator, in this case the farmer, puts into the computer.

"Software is the single most important item in any computer system," said Barton. "Without software," he said, "a computer is useless."

For agriculture purposes, said Barton, the "hardware" is easy to buy in comparison to "software."

"In agriculture, software has a big limitation — it is scarce," he said. He explained that there are few programs on the market that are applicable for the farmers need, therefore, "software" can be very expensive.

Barton stated, "A good rule of thumb to follow when calculating the cost of the total system is that the "hardware" will cost approximately 20 percent while "Software" and installation totals the other 80 percent.

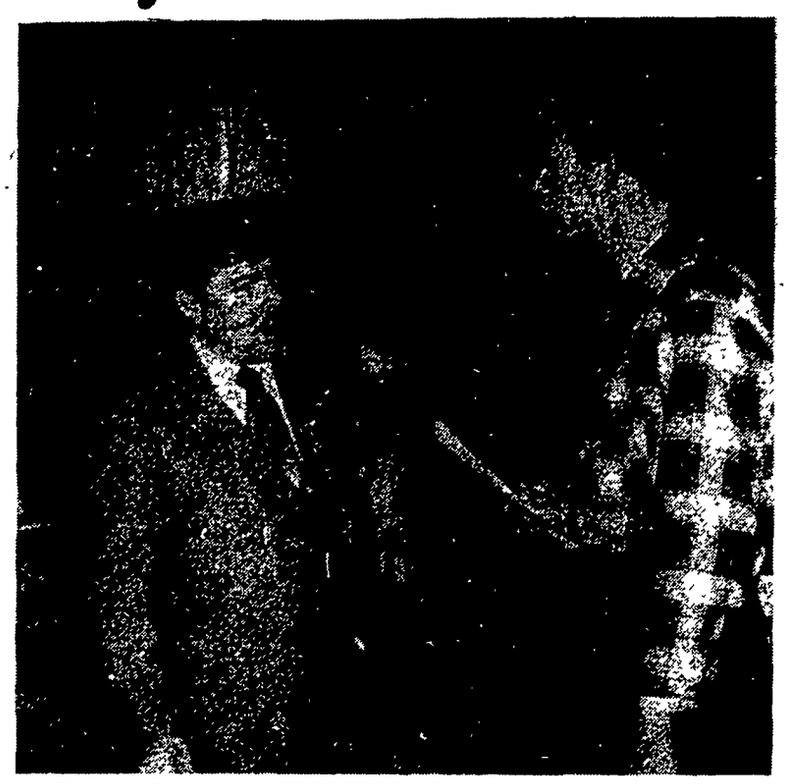
Small dedicated micro-or mini processors are used most by the farmers, said Barton. These dedicated computers are programmed to do one job according to their "software" program, from recording milking statistics to budgeting and projecting for next year's grain supplies.

Every farmer needs to project costs and returns. Some farmers do their projections manually, some have the help of an accountants and recently others have been using the microcomputers.

Barton gave examples of other useful ways the computer can be used on the farm.

The computer can be used to develop budgets that the farmer can change and update with the varying economic conditions and

(Turn to Page A30)

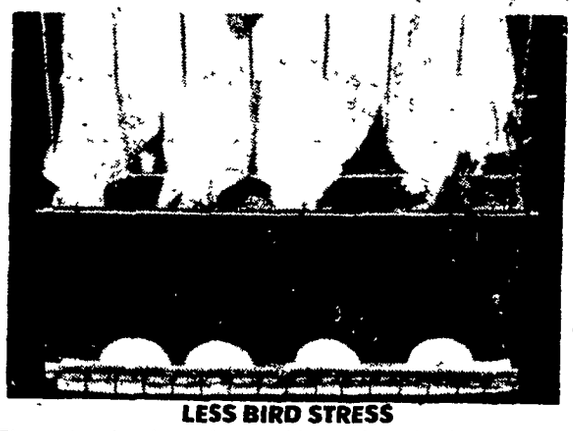


Eugene Barton, superintendent of record, American Jersey Cattle Club, left, discusses the use of farm computers in the dairy industry with an interested farmer at last week's Franklin County Dairy Day.

LEADERS IN REVERSE CAGE RESEARCH & DEVELOPMENT

PYRAMID CHORE-TIME

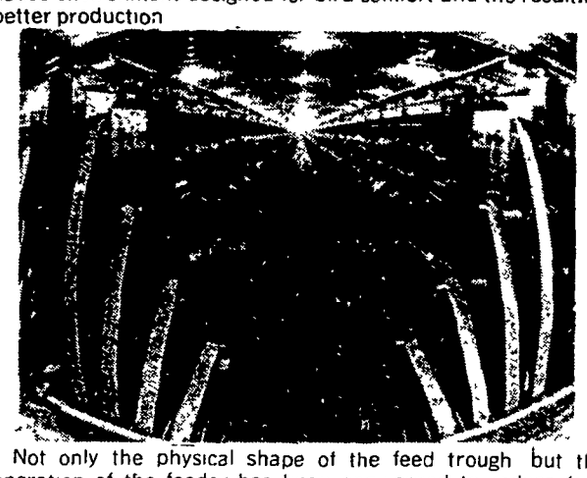
REVERSE CAGE LAYER SYSTEM



LESS BIRD STRESS

The system has been designed for bird comfort!

Each bird has her place at the feed trough Each has easy access to water Obstruction to light and the flow of air have been greatly reduced providing more uniform ventilation and lighting for every bird Combined with Chore-Time's automatically controlled air inletting system you get a layer house environment designed for bird comfort and the resulting better production



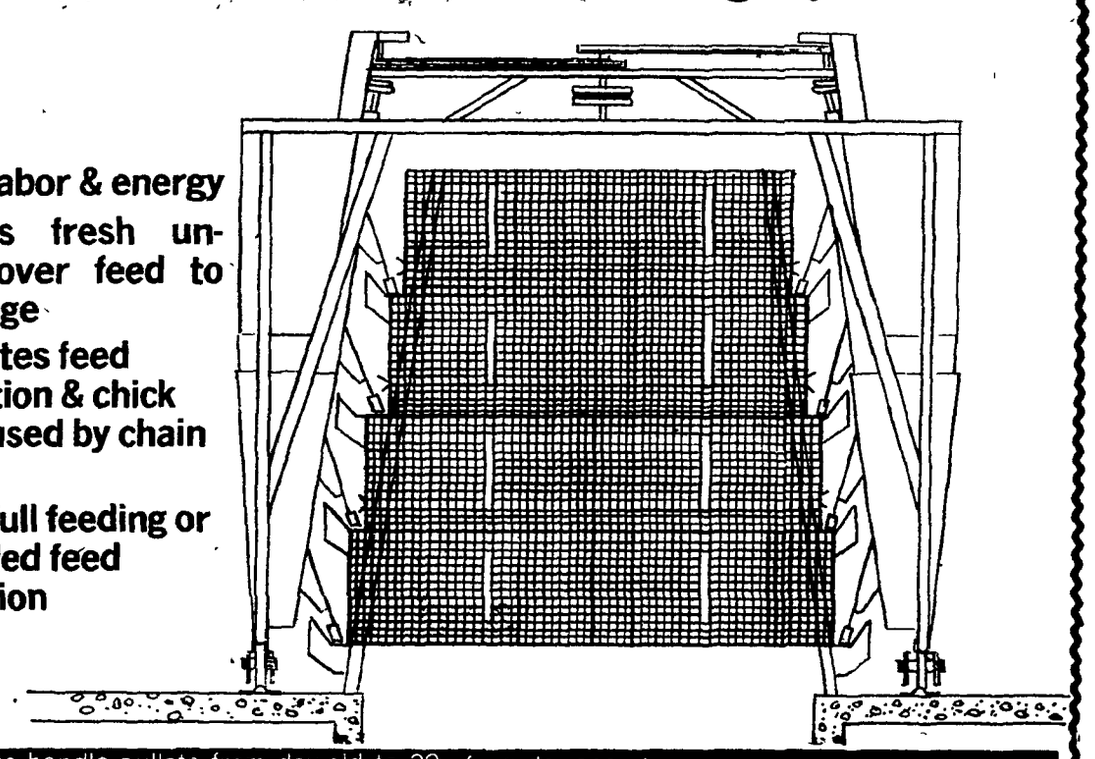
Not only the physical shape of the feed trough but the operation of the feeder has been engineered to reduce feed waste The trough shape cuts down on feed loss from "raking" and "billing" while the feeder has been specifically designed for Chore Time's programmed and performance feeding concept

New CHORE-TIME

4-HIGH BROOD-GROW CAGE SYSTEM with:

Mealmaster FeedKar™ Feeding System

- Saves labor & energy
- Delivers fresh unpicked-over feed to each cage
- Eliminates feed separation & chick loss caused by chain feeder
- Offers full feeding or controlled feed restriction



Developed to handle pullets from day-old to 20 weeks. Chore-Time's new 4 High Brood-Grow Cage System provides producers with an easily managed system designed to reduce labor and energy costs.

The new brood-grow cage system uses Chore-Time's proven, rugged GALV-A-WELD™ Cages. The new system was designed with the feed trough located outside the cage so you get the full cage bottom for effective bird space. And, with the trough outside the cage, the feed is fully exposed to house lighting to attract the birds from day one

The system also features Chore-Time's new MEALMASTER FeedKar™ Feeding System. MEALMASTER's labor-saving, energy-efficient traveling feeder handles all feeding chores, including pre-filling, from day one — automatically. The advanced feeding system distributes the daily feed ration uniformly throughout the house without the feed separation and chick loss experienced with chain feeders. MEALMASTER allows you to do full feeding or controlled feed restriction as desired

No. of Rows	CAGE ROW LENGTH 100'	150'	200'	250'	300'	350'	House Width
4	27,200	38,400	51,200	64,000	76,800	89,600	37'
5	32,000	48,000	64,000	80,000	96,000	112,000	45'
6	38,400	57,600	76,400	96,000	115,200	134,400	54'

*640 birds per 10' cage section

See These 2 Unique Cage Systems at the Open House on the Robert Grunder Farm!

ODERN
OULTRY
JPPLIES, INC.
omestead La.
PA 17601
9-0828
m Enck
g Gathering,
CPH Packer"

Rt. 79
To 181
To Rt. 17