美哈佛执安州大学农学院约翰逊，斯坦福德尔斯切得三位教授来华讲学纪念合影
1981.12.26于哈尔滨
奈良名所観光記念
法隆寺

（奈良交通定期観光バス）

古くは興福寺とともに、推古15年（607）聖徳太子が創建。境内は、五重塔、金堂のある西院と、夢殿のある東院を中心に、多くの塔頭からなり、金堂や五重塔は世界遺産の木造建築である。国宝・重文が数百件もある飛鳥美術の宝庫としても知られている。
in the Farm

farmers get questions.

Even so, the problem was completely solved in less than five minutes.

In this particular example, the computer announced that John Q. Farmer would save more than $2,000 if the combine were purchased and used eight years. It also gave advice on which method of depreciation to use and also said that it wouldn't pay to buy the machinery if it were used to harvest less than 240 acres.

Dr. Harsh, one of the leaders in setting up the system and computer programs for it, gave a rundown of the problems the equipment is capable of solving.

Variety of Programs

Among them are the investment question described here, calibrations for air-blast sprayers and seed sprayers, herbicide recommendations for corn, recommendations on what to do to combat apple scab, advice on fertilizers to use in various types of soil for various crops, income tax averaging analysis and income tax management analysis.

Although the system is fairly new, word of it has spread and, due to the time of year, the income tax programs already have proven to be popular. Another program now being readied will aid in diagnosing

push-button telephone set with them and have been instructed in how to use the system.

District horticultural agents soon will have the same equipment and training. If successful, the system might be expanded to include all county agents and possibly some agri-business firms.

A farmer now wanting an answer to a problem the computer is geared to solve simply would contact his

county agent to find out when the next swing through.

At first glance, contacting a person to the computer appears to take minutes of learning some basic aspects of the apparent mystery.

With a push-button telephone operated blindfolded, impulses from the device tell the machine what to do.

There's no problem if a part doesn't happen to be available (Michigan Bell's Touch-Tone). The computer can dial with the push for the initial contact.

Computer "Talks"

The person calling the computer-generated female voice can give the non-human voice the answers and repeat them if desired.

The computer also is programmed to have a chance to correct any error in feeding information.

Currently, the only cost involved is the computer's help, station-to-station phone call. Currently, there is no cost involved.

Although the system is open to the public, it is not for the service, it still can be used for sufficient demand, the system's perhaps enlarged to handle other activities.

While few, if any, farmers of their own, the MSU-U. of M. will be present as the telephone.

Synthia, a 'Gal' Who Does What She's Told

A mass of metal and electronic parts that talks.

It seems impossible. But anyone using the University of Michigan-Michigan State University agricultural computer program system knows it's true.

The fact that the computer can

intensity over. And machines reproduce any

sound.

The U. of M. and Michigan State University have found that female voice of the computer was better able to talk to farmers.
Computers Speed Up Farm Management Decisions

By Darrell Palska
Editorial Assistant
Department of Information
University of Nebraska

The age of computers may soon be available in the fingertips of every farm and ranch manager who has access to touch-tone telephoning or teletype systems, a University of Nebraska Extension Farm Management Economist suggests.

Dr. Larry Rilhey of the NU College of Agriculture said that the systems can be utilized for such decisions as whether to buy or custom hire machinery, to use income averaging rather than standard tax computations, and to determine how much an individual farmer can afford to pay for a group of feeder cattle.

The Extension economist noted that two states—Michigan and Virginia—already use touch-tone and teletype remote computer terminals to assist farmers and ranchers in making their management decisions. They are used mainly in Cooperative Extension work, but one Lincoln firm now uses the teletype computer terminal to figure least-cost feed mixes, Rilhey pointed out.

Demonstrated recently at the meeting in the North Central Extension Farm Management specialists in Lincoln, the two systems will become a definite part of farm operations in the future, according to Michigan State University Ag. Economist Al Tinsley.

Rilhey explained that with the touch-tone system, a touch-tone telephone is used to call a computer. After the computer is electronically activated by calling, information necessary for the computations is relayed by touching numbers corresponding to the data on the touch-tone telephone. The different sounding tones of each number check the computer to the exact information being demanded.

The answers from the computer are then transmitted to the touch-tone operator by the same computerized voice.

Rilhey explained that the system is designed to make those decisions easier and more accurate. Only a few seconds of computer time are involved, and only five minutes may be needed for a decision to be reached through the two systems, compared to possibly hours or days in present cases.

Because the computer costs about $70 per month, Rilhey added, only the larger farmers or businesses could afford the expense, but a county Extension office of a large company could profitably utilize such a system, leasing the devices to large companies to cover expenses of installation and maintenance. An advantage of the teletype is its reduced toll of calling, however, the touch-tone telephone would probably cost less than five dollars per month in addition to normal monthly telephone bills, he noted.

Rilhey cautioned that before managers can use and interpret such computer information, a workshop might be necessary so that they become adept at the system involved.

Rilhey also pointed out that the use of a touch-tone system is limited to problems with a relatively small number of input items. It therefore might not be suitable for farm record entries individually given, because of the large data accumulations.
WIND WORKS for me!
I'm at WINDPOWER 2010

AWEA
THE POLITICS OF ENERGY

- Several proposed and actual legislation to reduce greenhouse gases
- Push for renewable energy in the President's State of the Union Address and the new administration
  - 20% electricity from wind by 2030
- State level developments
  - Michigan 21st Century Energy Plan
  - Newly passed energy bills
- Other reports and influences
  - United Nations recent global warming reports
  - Al Gore's award winning film *An Inconvenient Truth*
- The new Copenhagen Accord (& Cancun Adaption)
  - Overall goal: Limit warming to 2 degrees Celsius
  - US Goal: Roll back from 2004 level, 17% by 2020
  - Reduction in the cost for fossil fuels