## Solar System Schematic for Solar Demonstration Home:

This drawing shows the details of how the solar home being built this year in the subdivision known as Northville Colony Estates No. 3 will convert the sun's rays into heat.



When completed, the solar home will look like this. There will be our bedrooms upstairs. The eventual buyer will be asked to monitor four bedrooms upstairs. Th solar results for two years.

## Northville pilot project

## It's a sunny, efficient home

They'll be hoping for a lot of sunshine in Northville this year—and not just to help the flowers grow. Northville is the site of a new solar energy home being ball folinity by Detroit Edson, the Bulliers. Association of Southeastern Michigan and the Fred Greenspan Development Corp.
The home is to be built in Northville Colony Estates No. 3, located south of Six Mile between Haggerty and Bradner.

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According to Detroit Edison president John R. Hamann, the house is being built to provide "the opportunity to test and monitor the application of solar energy in actual home construction and under normal family living conditions. This opportunity will prove most valuable in understanding potential future energy sources, and we are pleased to join in this major undertaking."

built by the Greenspan, which has been a prominant builder in the area for 30 years. It commentorates the 5th anniversary of Detroit Edison, the 6th of BASM and the 30th of Greenspan. The firm has been active in building homes, apartments and commercial developments in Lake Pointe Village, Plymouth, Birmingham Golf Estates, Huntigoto Woods, Oak Park, Detroit, Beverly Hills, Redford Township, Dearborn Township, Ann Arbor, Novi and Northville.

WHILE OTHER homes have been designed around solar possibilities, often with bizarre results in appearance, this home will have solar energy designed into the typical suburban dwelling of 1978. It will also represent the first industry-wide effort of its kind in the midwest.

According to Detroit Edison, ground was broken for the home last month.

When completed, probably by the end of the year, it will go on public view for perhaps a year under constant monitoring by Edison experts. It will then be sold with the provision the buyer will co-operate with Edison in monitoring and recording results for two years.

While solar energy as a heat source has received much attention nation-wide in recent years, it actually has been around for many years, and in some parts of the country in wide use. Edison people say there were 60,000 solar water heaters in Florida by the late 1850s, for example. The idea has grown in stature in California to the point where the state has a 55 percent tax credit on the cost of home solar systems.

BUT WHILE individual solar homes

BUT WHILE individual solar homes have been built experimentally in other parts of the country, and there

are commercial and institutional examples of supplementary solar heating in Detroit and Michigan, no industrywide effort to date has focused on bringing solar capabilities to the homeowner in the Michigan climate.

Says Hamann, "Detroit Edison recognizes the sun has many attributes. Its energy is clean, free and abundant. And it is expected to provide heat and light for millions of years.

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"Yet, for all its attributes, solar energy is also intermitant, diffuse and must be collected, So, to throughly explored its practical potential, Derviit Salison to the proper program designed to determine if solar energy technology can be integrated successfully and economically into a major power system such as ours and provide, at least, a partial answer to our problems of energy and the environment."

## You name it and they research it

By KAREN KOPEIKIN
Because the Detroit area is the center of America's auto industry, people are aware that automobile research and development is constantly changing the look of tomorrow's cars.
While conducting their own experiments, the Big Three automakers regularly him small local research firms to study auto pollution, test transmissions and develope perimental cars that will rum more efficiently, with less gas.
But this area has much research poing on that is not connected with the auto industry. Scientific and industrial research and development has made western Wayne and Oakland counties a center where scientists and engineers flock to gather data, and design and test new equipment of all kinds.
Research in the aerospace and air-raft industries, the medical fields and the fuel industry result in rapid changes in technology.

BROOKS AND FERKINS, an inter-

BROOKS AND PERKINS, an inter-national company headquartered in Southfield, with a main plant in Livonia, develops and manufactures products for private and government air lines. Carl Calandra, director of sales and marketing for Brooks and Perkins,

said the company is the world's largest manufacturer of rail systems for cargo and baggage.

The rail systems are designed to transport cargo to the plane and once inside, fasten its securely for flight.

The company is developing a cargo system for a new Boeing cargo plane called the advanced medium and short take-off and landing (AMST). The plane's main feature is its ability and and take-off from small runways. Brooks and Perkins has also developed a container designed to store used nuclear materials. According to Calandra, the containers keep radioactive elements isolated and in storage for long periods of time without leakage.

ANOTHER INTERNATIONAL com-

for long periods of time without leakage.

ANOTHER INTERNATIONAL company, Contamination and Control Laboratories, locally marufactures equipment for pharmacles.

It has recently developed and now markets, a "clean edge," a miniature sterile environment that aids in the preparation of intravenous solutions and medicines, according to company researcher Philip Austin.

Sold to hospital pharmacles, the clean edge provides a sterile atmosphere for mixing drugs and solutions that will be given to a patient intravenously.

IN THE FUEL INDUSTRY, a Red-ford Township-based company, Gen-eral Oil Co., is working on new proc-esses to reclaim oil from industrial

esses to reclaim oil from industrial waste.

Timothy Westerdale, company president, said General Oil reclaims an average 10 million gallons of oil each year.

"A new process has been developed recently," he said, "which reclaims oil

from waste material previously used only for land fill."
He said the company can now chemically treat industrial waste that contains only 30 per cent oil and successfully extract that oil.
Most of the oil reclaimed by General Oil is used for industrial machining.
Other local companies conducting research refused to comment on their operations.



In conjunction with the U.S. Army, Brooks & Perkins designed and built this 8x8x20 foot cargo-carrying helicopter gondola. It is manufactured of aluminum and is forkliftable for ground handling.

