

Solar energy bubbles studied



Field of heliostats could produce energy equivalent to a 10 megawatt power plant.

Last summer, Navy planes spotted four giant, suspicious looking bubbles growing on the desert 25 miles southwest of Boardman. After circling the area several times the pilots radioed the discovery

the company's first research model of a heliostat solar reflector.

Transparent plastic, called Tedlar, covers the igloo-shaped domes that measure 17 feet in diameter. Inside the domes

actual power plant operation.

The mini-computer is programmed to track the sun in its path across the sky.

The three NASA units obey the commands of the mini-computer and follow the sun,

the tower measure the amounts of energy received at different times of the day and under varying weather conditions.

Collection of solar heat data as a possibility for boiling liquid to be used in turning a turbine engine is not the sole aim of the experiment. Effects of weather on structure and material make-up of the heliostats is also being studied.

The heliostats are designed to withstand 80 m.p.h. winds with gusts up to 100 m.p.h. Durability of the 6/1000th-inch plastic that covers the airtight heliostats is one of the questions that NASA is checking into.

"We had to put heaters in the heliostats to keep ice and snow from gathering on the tops of the bubbles," said Holmes. Researchers are also interested in seeing what affect abrasive dust storms have on the heliostat plastic.

Should the units check out as a viable means of collecting

solar energy, it could lead to a field of three thousand heliostats or the equivalent of a 10 megawatt power plant. The collectors would cover about 50 acres.

Solar energy will contribute to the nation's energy supply one day but John Lowe, head of solar energy activities for Boeing Engineering and Construction, cautions that the time this will happen is not just around the corner.

Hospital

Admitted and dismissed from Pioneer Memorial Hospital this week were Teena Galbraith, Lexington; Ryan Heath, Heppner; James Phillips, California; Robert Powers, Fossil; John E. LaTrace, Heppner; Beulah Florence, Heppner; Thomas Howell, Jr., Lexington; Geneva Blackburn, Heppner; Marion Olsen, Heppner. Still in the hospital Wednesday were Alex Ulrich, Heppner, and Lyle Peck, Lexington.

Boardman news

•Layon Starr

back to their base.

What the pilots had stumbled on were neither space vehicles nor oversized jellyfish. Located at the Boeing Company testing site, four bubble shaped heliostats were being studied as possible collectors of solar energy.

Three of the heliostats are under contract to the National Aeronautics and Space Administration (NASA). The fourth is involved in a separate Boeing experiment. It is

are round, 15-foot frames covered with a plastic coated Mylar film. The film produces a mirror reflection. They are mounted on a two axis gimbal and driven by digital controlled stepper motors. The entire unit, excluding the concrete foundation, weighs about 200 pounds.

NASA's heliostats are equipped with control mechanisms that are connected to a mini-computer for testing under conditions simulating an

reflecting its image onto a focal point at the top of a nearby rocket test stand. The five-story stand was first built in the 1960's when the Boeing property had been chosen as a test site for a Boeing-built moon rocket. That project was later moved to Mishould, La.

The rocket stand is now being used for simulation of the solar reflector receiving tower.

Instruments at the top of

Boardman farmer predicts growth

John Prag, Boardman area farmer, at a recent noon luncheon meeting of the La Grande Lions Club, told Lions of the spectacular development of the Morrow County port area in recent years.

"About 1969, the Boeing Company, who had leased 100,000 acres of land in the Hermiston-Boardman area, switched the lease to an agricultural effort, developed the center-pivot sprinkler system that is now being used in 202 installations, irrigating 130-acres each, and with all private capital; except the government installed the McNary dam, developed the potato-growing and marketing industry in that area to the point where Oregon is now the third largest potato producing state in the union, with 75 per cent of the production being in the Morrow County area.

"The world's largest 'fresh-pack potato' operation is located near Boardman, and

another plant is going in at Hinkle. Several French-fry plants are located in the area and one immense 'flaking plant' which uses the portion of the potato otherwise unused."

Prag defined other results of the development and possibilities for the future as being an extremely low tax-rate for Morrow County, around 12-mills; expectation of building a community of from 10 to 12-thousand at Boardman within the next 20-25 years, building a large steam power-generating plant using coal for fuel, possible building of from 1 to 4 nuclear power plants, and possible diversification of crops to include alfalfa, beans, wheat, grass seed, mint and sugar beets.

"Agricultural acreage in the area no longer than 15-years ago sold for \$5 an acre, and is now around \$1,200 to \$1,500 and expected to soon average around \$2,000," Prag stated.

Outages, ice build-ups experienced in area

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Power outage and ice build-up have also been experienced east of Heppner up Little Butter Creek. The fog condition has extended from Highway 395 westward, covering vast portions of the Umatilla Drainage Basin southwest into Wheeler and Gilliam counties.

Outside the fog bound area, sunshine has been the rule. On the east, the fog concentration through the weekend started along Highway 395, dropping off the west side of the Battle Mountain summit. To the west, Fossil has remained generally clear. The heavy concentration of ice buildup settled in the Condon area and extended northeast into the lone area.

The Eightmile area and most other areas immediately outside of Heppner have ex-

perienced heavy ice buildup. Heppner and the immediate vicinity have been comparatively free of ice buildup and road problems during most of the three weeks of foggy weather.

Umatilla Electric Co-op has also been affected by the weather conditions and reported as many as 35 additional people in the field to clear ice from lines.

A number of high school students from Heppner helped clear iced lines over the three-day weekend. In addition to those on extra payroll have been special construction crews hired to replace down power lines. Farmers and ranchers have been assisting, bringing the number of persons at work on the problem into the hundreds.

School district lists vacancies

The Morrow County School District board has announced two vacancies on its advisory committee from the Boardman-Irrigon area.

The positions are Nos. 2 and 5. Both are three year terms.

Petitions for election are available at the school district office at Lexington. Signers of petitions and the candidate must reside in the zone or

attendance area from which the candidate is to be elected. A minimum of 10 signers is required. They must be registered voters in Morrow County.

Completed petitions are to be returned to the school district office or to the county clerk's office before Tuesday, March 15.

Annual election has been set for April 19.

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Eight Heppner merchants join in wishing you a Happy Valentine's Day, February 14th. They offer you sweetheart deals on a variety of items. Have your heart set on a Valentine? Pick them up a prize from one of these cupid coupons. Coupons good through Monday, Valentine's Day, unless otherwise noted by individual merchants.

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