NUCLEONICS DIVISION
NEWS BUREAU
GENERAL ELECTRIC
HANFORD WORKS RICHLAND, WASH.

RELEASE DATE
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OR THEREAFTER

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Portland, Ore., Jan. 8 -- Although electric generating plants using atomic reactors as heat sources are not now economically feasible, substantial progress is being made in the research and development work necessary before atomic generating stations can be built, according to Harold W. Huntley of General Electric Company's Nucleonics Division.

Huntley, a chemical engineer engaged in studies of atomic power generation, spoke today at a luncheon meeting of the Electric Club of Oregon.

G. E. manufactures the nuclear fuel plutonium for the Atomic Energy Commission at Hanford Works in southeastern Washington. Huntley is now located in the Schenectady, New York office of the Nucleonics Division, but has had earlier assignments at Richland, Washington, headquarters of the Division.

An electric generating station using atomic energy is too costly at the present time, Huntley said today. Present designs for atomic reactors still cost much more than the equivalent coal, oil, or gas burning equipment. Uranium and other atomic fuels, although tremendously more compact heat sources than conventional fuels, cannot yet be "burned" with sufficient efficiency to compete economically.

In an atomic power station, according to Huntley, the steam turbine generator, the electric generator, transformers and switchgear would be similar to those in use today. An atomic reactor and heat exchanger would replace the furnace and boiler in use in existing steam plants.

Huntley discussed five phases of the atomic energy program as they relate to the development of atomic power. The five categories are: (1) production of plutonium, (2) the reactor program for ship propulsion, (3) the experimental reactors being built and operated in the United States, (4) design studies by engineering organizations, and (5) studies by four groups of utility companies.

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General Electric now has between 10% and 15% of its technical manpower committed in atomic energy work in three areas in which it is actively engaged. The number of scientists and engineers involved is an indication, Huntley concluded, that General Electric believes there are peacetime possibilities for use of atomic power in the future.

Huntley has been working in the nations atomic energy program since 1943 when he joined duPont at Clinton Laboratory at Oak Ridge, Tennessee. He moved to Hanford Works in September, 1944, and transferred to General Electric when that firm assumed responsibility for Hanford in September, 1946. He held a variety of engineering assignments at Hanford until his transfer to Schenectady in 1951.

Huntley is a native of Ohio. He graduated from Case Institute of Technology in 1941 with a B.S. degree in Chemical Engineering.

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HANFORD ATOMIC PRODUCTS OPERATION
NEWS BUREAU
GENERAL ELECTRIC
PHONE: 4-2258 RICHLAND, WASH.

IMMEDIATE

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RICHLAND, WASHINGTON, JANUARY 14, 1954--

A highly important milestone in the life of Richland, hometown of the atomic energy industry, has been reached.

There used to be a bare, dusty, roughly-leveled field near the center of town. Now, four years and $2 million later, that piece of ground is covered with modern business buildings, broad parking lots, and concrete sidewalks.

The first building (a men's and boys' clothing store) in this amazing business district opened its doors during the summer of 1949. When the J. J. Newberry building is completed in February, the last square foot of land in the area will be occupied.

Here's the story of how 24 acres of bare ground grew into a prosperous business district.

In 1943, Richland was a farming village of about 240 population when the government bought it, lock, stock and irrigation ditch. It was on the edge of a patch of desert that had been picked for the construction of a huge atomic energy plant--the first of its kind in the world. Ultimately, the government reservation covered over 600 square miles, more than half the size of Rhode Island, and the plant represented a war-time capital investment of around $350 million.

The plant reservation included the village of Hanford, which was converted to a construction camp during the initial plant construction period and then was completely evacuated. Richland, also inside the reservation, was nearly 30 miles south of Hanford on the banks of the Columbia. Another ten miles

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downstream lay Kennewick, and across the river from this peaceful little town was the small railroad center of Pasco which, in the very beginning, housed some of the offices for the atom project.

Richland was expanded to about 16,000 population to house the plant employees, their families, and a few businessmen. The government built all the buildings. They provided for just enough businesses to take care of the minimum essential needs of the populace. It was thought at the time that as soon as the war ended, the great atomic plant would be shut down and the town would disappear.

But in 1946, after Congress had held its atomic energy hearings and passed its famous Atomic Energy Act of 1946 (The McMahon Act), the newly created Atomic Energy Commission brought in General Electric Company as prime contractor to operate both the plant and the town, and it was agreed all around that the Hanford plant, as it was called, would be a permanent part of the eastern Washington geography. In fact, they decided to expand it. And they decided that they would have to expand the town to keep up with the plant, which meant that the business community of the town would have to be allowed (encouraged would be a better word) to grow big enough to take care of not only the "minimum essential needs" of the expanded population, but the normal need for goods and the normal need for competition to make shopping attractive in Richland.

All this led to the following actions:

1) All fixtures and inventories in the government-owned business buildings were offered for sale to the operators.

2) Businessmen in government-owned buildings were given the right to make additions and improvements in the buildings they were leasing.

3) A plan was drawn up to let investors construct business buildings on land leased from the government on a long-term basis. And,

4) (most important point as far as this story is concerned), a whole new business district was planned to supplement the original business district, which was hemmed in by land already in use for other purposes.

That's where the bare, dusty, roughly-leveled field came in.

It started out as a piece of wasteland half a mile north of the original business district with a tiny creek winding down the center. There was sagebrush and a little grass and along the banks of the stream grew willow and Russian olive. It didn't look much like a business district.

In the summer of 1948, the land was leveled, the creek was channeled into a 6-foot box culvert that was buried in a section that later became parking area, and crews started laying water lines, sewer pipe, and storm sewers.

The following spring, utility poles were planted and underground cables were run out to the spots where parking lot light poles would be located, 16 acres of asphalt were rolled out by the contractor for parking space, and the concrete sidewalks and parking bumpers were poured.

During and after the site preparation work, the job of bringing in businessmen was energetically pursued.

On the face of it, this might look easy.

The new business district would be an integrated development with ample utilities and parking space at the outset. It would be neat and unified with no driveways crossing sidewalks--establishments like garages and cleaning plants would be located in a separate development, the "light industrial area". In addition, Richland was woefully underequipped, commercially, and it

was in a period of rapid growth, certain to reach at least 25,000, and its payroll was steady. There were almost no rich people, but there were no poor--and no unemployed, because the housing (government-owned) was available only to people working on the plant or in community facilities and the school districts.

But there were a lot of complicating factors.

The land wasn't for sale. Nobody could guarantee that the plant would be kept in operation beyond tomorrow; and it was the sole source of income to the town. Since it was a government project, leases were let usually on the basis of sealed bids presented by investors. The government insisted, at first, that all rent should be in the form of percent-of-gross. And the wartime shortage of merchants had created the habit among the residents of making weekly shopping trips to other towns.

Besides that, nobody seemed to know that the place existed. Some people in Portland and Seattle had heard that there was some sort of atom plant out on the desert near a dot on the map called Richland--others hadn't heard. Even in Walla Walla, only 60 miles away, most of the people would have been incredulous to learn that Richland had grown from the tiny farming hamlet of pre-war days to a booming city as large as their own. Some road maps still insist Richland has a population of 240.

G.E. had a group at Richland called Commercial Facilities Division (the forerunner of the present Commercial and Other Properties Unit) that drummed up interest in Richland among outside businessmen, opened bids for the leasing of building sites, got approval from the AEC for the deal they thought best, and awarded and serviced the leases.

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During the dusty field days of the new business district, the job of drumming up interest among businessmen was no cinch.

The two top men in the organization, R. J. (Pete) Pederson and M. L. (Merv) Blum, literally traveled the length and breadth of the country hunting for people with money to invest in Richland's future. Just trying to describe Richland, its tremendous growth, and its peculiar problems was a big job, whether they were talking to the potential operator of a coffee shop or the officials of a big department store chain or automobile manufacturing company.

A number of factors combined to make it possible to bring businessmen with private capital into town.

The favorable situation as far as municipal facilities were concerned helped--ample parking space and utilities, excellent police and fire protection, good streets.

A large and steady payroll helped, too. The annual rate of G.E.'s payroll in 1949 was about $36 million and this year it is running around $48 million.

The fact that there were only around 45 businesses in a town of 20,000 in 1948 also was impressive. There are now close to 200 businesses, and the population is about 28,000. But even now, potential investors who come in to look around find plenty of elbow-room.

As more and more vacant lots became the sites of clean, modern buildings, G.E. receded farther and farther behind the scenes. As it now stands, 19 of the 28 buildings in the new business district house more than one business--from 3 to 10. Naturally, the investors who built these buildings did some recruiting of their own to fill their buildings up. The general publicity engendered by G.E. may have helped, and Commercial Facilities steered interested

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small businessmen to these owners of multiple buildings, but the pressure was off the G.E. people when it came to tracking down and bringing in the small fill-in businesses.

Now that the new business district is about complete and Richland's business community has blossomed out into a full-fledged, free-enterprising, going concern, the merchants and professional men of the town have embarked on a long-range effort to make Richland a trading center.

Meanwhile, there is another bare field, bigger than that other one five years ago. It adjoins the new business district at its north end, and was set aside for future business development. And already, interest is being shown in further commercial expansion into this area.

PRESS RELATIONS

GENERAL ELECTRIC

HANFORD ATOMIC PRODUCTS OPERATION
RICHLAND, WASHINGTON
PHONE: 2-1111, EXT. 6-5261

H. G. Hauschild

FOR RELEASE AFTER 7 P.M. JANUARY 22

PENDLETON, Ore., Jan. 22---Nuclear energy may provide as much as 15 per cent of the electric power produced in this country by 1975 and possibly half of that needed by power-short countries such as Great Britain within the next 20 years.

Willis G. Browne, a General Electric engineer at the Hanford atomic center, this evening described for Pendleton Jaycees and their guests, some of the changes which have been brought about by man's harnessing of the power of the atom. He projected this progress into what can be expected within the next few years.

Browne, a contact engineer in the Research and Engineering Operation of the Chemical Processing department at the Hanford plant, was guest speaker at the annual Jaycee banquet. He is a member of the staff of General Electric, prime contractor for the operation of the Atomic Energy Commission's Hanford works.

During the past 100 years the world has used up about as much energy as was used in all of the 1800 years after the birth of Christ, Browne said. About 80 per cent of this energy came from burning coal, oil and gas. The remainder came from hydroelectric power, muscular energy and from burning wood and agricultural waste.

The world's demands for energy will continue to rise, and at the

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present rate of increase, its supplies of coal and oil may be exhausted in less than 100 years. In order to improve, or even maintain, our standard of living a new source of energy had to be found.

Man's ingenuity led him to the key which unlocked the door to the tremendous amounts of energy locked within the atom. Although he has made great strides in using this energy, he has still hardly scratched the surface, Browne said.

The release of power from one ton of uranium is equivalent to $2\frac{1}{2}$ to 3 million tons of coal. If future energy is to come from uranium and thorium, the atomic fuels now being used, the reserves of these materials may amount to as much as 40 times the reserves of coal and oil.

Other benefits of the atom are coming to man in the form of radioactive isotopes, by-products of the operation of nuclear reactors. These radioisotopes are finding increased use in agriculture, medicine and industry to help man do his work better and more easily.

Browne sees the atom as the means of man achieving a fuller life with better means of combating disease, better varieties of crops with fewer insect pests, improved industrial techniques and increased power to make his life easier and more enjoyable.

As an illustration of entirely new benefits made possible by harnessing the atom, Browne displayed a direct source light which uses krypton-85 as a source of energy. The radioactive krypton activates phosphors which give off a glow. Such a light will last for ten years burning day and night and is explosion proof since it generates no heat and uses no electricity.

PRESS RELATIONS

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RICHLAND, WASHINGTON
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R. W. Newlin

RELEASE OCTOBER 31, 1959

General Electric will end a 13-year era as operator of the City of Richland November 1 when the final municipal function -- the Electrical Operation -- is turned over to the city.

Thirteen of the present staff of 17 employees in the Electrical Operation will transfer to the city and four will remain with General Electric. L. H. Holden, superintendent of the operation for General Electric, will remain as superintendent with the city.

Transfer of city services from General Electric to the city has been taking place gradually since June 1, 1959. Richland became incorporated in December of 1958. Prior to that, Richland had been a government operated town for 15 years. General Electric began operating city functions in 1946 when the company became prime contractor to the Atomic Energy Commission at Hanford, succeeding the du Pont Company. General Electric will continue to act as landlord for the Atomic Energy Commission in managing commercial property not yet sold.

Functions already transferred to the city are the Police Department, Recreation, Engineering, Library, Fire Department, Public Works, Water and Sewerage, and some office personnel.

Serving a boom city has required rapid growth on the part of the electrical facility that provided kilowatts for only a few hundred people in 1943 when it was acquired from Pacific Power and Light Company. Today -- only 16 years later --

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the Electrical Operation has the capability of serving 36,000 people.

In 1949, the Richland electrical system was almost completely rebuilt to take care of additional housing that was being constructed at that time. There has been about a 30 percent increase in the number of kilowatt hours sold in the past eight years, reaching a peak of 126,000,000 kilowatt hours in 1958.

Recognition of the Electrical Operation's efficiency during this rapid expansion came in the first part of 1959 when the Richland utility received an award as a member of the One Cent Club of the Northwest Public Power Association. This award indicates that the average cost per kilowatt hour to residential consumers is less than one cent. In Richland it is .97 of one cent.

The rates charged in Richland are comparable to rates in other cities of the Tri-City area and lower in cases where more than 1300 kilowatt hours are used per month. Electricity for Richland is purchased from the Bonneville Power Administration.

Transferring to the city besides Holden are A. J. Waters as assistant superintendent; L. W. Peterson, line foreman; and O. F. Henry, electrical foreman.

Electrical bills have been handled by the city since October 1 and soon after November 1 electrical offices will be moved to city hall and the shops and maintenance headquarters to the 722 hangar in Richland. These facilities are now at 910 Spangler Road north of Richland.

NEWS BUREAU
GENERAL ELECTRIC
3325 Wilshire Boulevard, Los Angeles 5, California
DUnkirk 1-3641

ROBERT H. JONES

10-3-60

FOR IMMEDIATE RELEASE

LAKE GEORGE, N. Y. -- A crew of five skin drivers are probing the frigid waters of Lake George in an effort to chart the remains of a mystery fleet of ships which may have been sunk more than 200 years ago.

Their search is aided by new tools of science, including closed-circuit television and underwater lighting provided by General Electric.

The wooden ships are believed to have been used in the French and Indian or Revolutionary Wars. Remains of at least 15 of them are known to lie beneath this mountain lake, now one of the most popular vacation spots in New York's Adirondack State Park.

The operation is headed by Dr. Bruce Inverarity, Director of the Adirondack Historical Society, who said television views relayed back to the surface will make it easy for archeologists on the lake's surface to direct the divers below.

Using the TV camera, the divers will chart the exact location of each ship and will then send up surface markers. So far as is known, this will be the first such use of closed-circuit television in inland waters. A special waterproof housing for the television camera was designed by G-E's General Engineering Laboratory.

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The ships lie in a staggered line, 30 to 80 yards off shore in about 40 feet of water, and only a short distance from the lake's largest public beach.

Divers who have made preliminary observations report that the vessels are weighted down by large stones and appear to have been deliberately sunk.

Why the ships were sunk, who did it and when -- and what the ships were doing there anyway, are some of the questions being worked on by historians.

General dimensions and shape of the vessels -- each measures about 32 feet long by 8 feet wide -- fit early descriptions of "Bateaux," troop ships used in early military action across Northern New York. This would date the vessels at least back to 1755. Also testifying to age of the ships is condition of the rib sections and of other remains brought to the surface.

First phase of mapping and charting operations is expected to take about one week, after which certain of the vessels, or more likely portions of them, may be raised for detailed inspection. No efforts to recover further remains of the ships will be attempted until the charting has been completed. It is hoped that a careful search of the lake bottom throughout the area of the sunken ships may turn up artifacts which will help both in identifying the vessels and in determining the precise historical period to which they belonged.

Dr. Inverarity said the mystery ships may prove one of the most interesting historical finds in recent years. He added that while writers of the period made frequent references to "Bateaux," few persons living today have ever seen one of these ships -- on the bottom of Lake George, or anywhere else!

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PRESS RELATIONS
GENERAL ELECTRIC
RICHLAND, WASHINGTON
PHONE: 2-1111, EXT. 6-5261

RELEASE ON RECEIPT

FYI

PORTLAND, Oregon, April 26 -- The geologic history of the 100 million year old Columbia River was spelled out here tonight by a General Electric geologist at a meeting of the American Society for Metals.

R. E. Brown, a member of the Earth Sciences unit of the Radiological Sciences department at the Hanford atomic plant, told an audience of ASM members and their wives that the 1200 mile long Columbia is the oldest river in the Northwest and one of the oldest in the country. "It has been the historian of nearly all the geologic events that have made the Northwest as we know it today," he pointed out.

Brown said the Columbia has "seen" a multitude of plant and animal life come and go. Such animals as dinosaurs, rhinoceroses, fox-sized horses, rabbit-sized camels, peccaries, saber-toothed cats, hippopotami, mastodons, elephants, bear-dogs, bison, buffalo and musk ox have inhabited the Columbia River draingage area in the past. Plants have varied from shrubby avocado trees to towering redwoods. He said hundreds of different species of plant and animal life were buried

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and preserved by volcanic lava, which today is exposed in much of Eastern Washington and Oregon.

Brown was guest speaker at the first ladies night meeting of the Oregon section of the ASM.