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Authorities Question Microwave Safety

Exposed Moscow Embassy Employees Subjects of Cancer Survey

From United Press International

Microwave technology has made modern life easier in many ways, and not just by drastically reducing the time needed to get hot food on the table. But authorities are increasingly concerned about the damage these waves could do to a person's health.

One well-publicized incident occurred at the U.S. Embassy in Moscow, which the Russians were reported

edly bombarding with microwaves to listen in on secret conversations.

Many persons who have worked at the embassy since the Russians started beaming microwaves at it in the 1960s are said to have come down with cancer or precancerous conditions.

Is it the microwaves?

One authority told President Carter the former residents of that embassy

have the highest incidence of cancer of any group in the world.

The truth will be known when Dr. Abraham Lilienfeld reports in June on his analysis of health records of the up to 4,000 persons who have worked at the embassy since the 1960s.

Lilienfeld, from the Johns Hopkins School of Public Health in Baltimore, was commissioned by the State Department to look for the suspected cancer link.

The question Lilienfeld addresses goes beyond the American Embassy in Moscow and those who worked there.

Other researchers are trying to answer it through research with laboratory animals exposed to various doses of microwaves.

But the question for everyone in these times of a swiftly developing technocracy is: Do microwaves injure people either at once or eventually?

William J. Thaler heads the U.S. Office of Telecommunications Policy, part of the executive branch. In an interview he said he is pushing for a

long-term study of populations living in areas of microwave pollution.

People living near airports, in urban areas and near broadcast towers powered by microwaves may be the ones to keep track of, according to Thaler.

Such studies, as the physicist sees it, would bring some significant answers to the questions about microwave pollution and its alleged threats to health.

"We need research trying to identify the problem without causing panic," he said.

Asked if people living near radar installations or broadcast antennae were in any greater danger than others, he said, "I don't know."

The National Research Council of the National Academy of Science is circulating a proposal to investigate microwaves. The council wants to study the epidemiology (disease patterns of exposed populations), assess research efforts, and determine the size and effect of this electronic smog, as it is called.

Thaler said a big problem is that there are few true experts in the microwave field. Such an expert would be a combination biologist, electronic engineer and physicist.

One example of microwave pollution is found in the huge high-rise buildings in the nation's cities, including the World Trade Center in New York.

At Chicago's 106-story Sears Tower, the world's largest building, microwave leakage from broadcast antennas on the roof measured a level five to six times that being beamed at Americans working in the embassy in Moscow.

But the Environmental Protection Agency said there was no cause for alarm and that the level of microwave pollution in the Sears Tower was about that allowed to leak from microwave ovens.

That can be viewed calmly or with alarm, but some experts say bluntly that they wouldn't own a microwave oven.

Thaler said the microwave problem involves all levels of government and reaches into almost every department.

proposal for a vast investigation aimed at determining a health

level of exposure and leading to a national policy, as suggested by the National Research Council, would call on cooperation from the Defense Department, the Food and Drug Administration, the Federal Communications Commission, the State Department, the CIA, the Environmental Protection Agency, the Commerce Department, the Federal Trade Commission and more, including the Army, Navy, Air Force and Marines.

Already, according to Thaler, some \$8 million to \$10 million a year is spent by the U.S. government for research aimed at answering the many unknowns about microwaves, on the scene only since the early 1940s. But he said that isn't nearly enough, considering the problem.

Microwaves—invisible and soundless—can cause sudden death, something the Army knows. Its flameless flamethrower uses specially focused microwaves which can cook an enemy the way a microwave oven roasts meat.

Investigations under way may show, as suspected, that the antenna of a citizens band radio can give off microwaves that could damage a passerby.

Some men using citizen band facilities for police departments have developed microwave-connected cataracts. The heat from microwaves in their communications equipment is suspected of cooking the lens of the eye much the way heat turns an egg white opaque.

Ophthalmologists have documented cases of servicemen working with and around radar as having such cataracts.

If microwaves hurt people, the population at risk in the United States alone may be as high as 15 to 20 million, according to Paul Brodeur, New Yorker science writer, who discussed the problem in "The Zapping of America." He is calling for a congressional investigation and wants Henry A. Kissinger called in "to tell the truth about what's going on in Moscow."

In interviews with authorities on microwaves, it was learned that concern over microwave pollution is growing among citizens and government officials. Brodeur is not alone.

waves, tend to soft-pedal the alleged dangers to health.

In addition to cancer, some researchers suspect microwaves are linked to cataracts, sterility, and genetic damage that could doom uncounted innocent victims to birth defects.

There are concerns about exposure to microwaves among people who live near military installations with radar equipment.

In Sacramento, Calif., and in the picturesque Cape Cod area in Massachusetts, citizen groups want more than the Air Force's word that their health is not being jeopardized.

The 762nd Radar Squadron base in North Truro, Mass., is said to have a danger zone 800 feet in circumference, yet golfers tee off within sight of the place.

In Sacramento, citizens represented by lawyer Leslie Perry went to federal court to get some guarantee of regard for their health.

Perry said the citizens are concerned about a radar installation at Beale Air Force Base in Marysville, Calif. The Environmental Protection Agency investigated the facility and said it won't harm people, but some observers said that was like asking the fox to probe the chicken coop raids.

But microwaves, friend or foe, are a key thread in the fabric of the technological society.

Airports couldn't operate as efficiently or safely as they do without radar which depends on microwave energy, and the country's defenses would be behind the times without it.

Millions of American kitchens are magic places due to microwave ovens, one of the hottest selling Christmas items. By 1980, about 11 million American homes may have microwave ovens. But will children get cataracts from peering through the glass to watch cookies bake?

The fantastic reach of television and radio couldn't exist without microwave transmitters, many housed on top of skyscrapers across the nation.

Long-distance telephone calls would be more expensive without the microwave relay towers that send messages 25 to 30 miles at a clip to the next tower without lines.

Communications satellites high above the earth's atmosphere use microwaves to provide efficient and inexpensive transmissions to all parts of the world.

On the surface, microwaves are man's ingenious servant—until you weigh some of the happenings in the U.S. Embassy in Moscow, hear of the concerns in the State Department, re-

view some of the evidence suggesting a "microwave time bomb" theory and

listen to the people who worry about microwave pollution.

It is greatest in the big cities, around airports and military installations, near antennae for broadcast facilities and in selected embassies being bombarded with microwaves designed to pick up secret conversations.

In research, microwaves have been used to tinker with the central nervous system, induce fatigue and affect behavior.

Science writer Brodeur relates a story about the Truro Air Force Station. Last summer "... a front-page story in the Advocate (local paper) appeared beneath the headline: "Truro Radar Could Fry Hang-Gliders."

The article warned that powerful microwave transmissions sent out by three radar units could injure or kill hang-gliders who wandered into airspace near the Truro Air Force station, quoting a Capt. Leland Downer of the base.

Under the worst combination of circumstances a man could fry in those things," the captain said in reference to the radar units he was then responsible for maintaining.

Lt. Col. Franklin Hall, base commander, is quoted as saying: "A pilot can be injured by radiation without even knowing. Radiation symptoms may not show up for two years."