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Radiation Sickness: Medical and Political

[Non-Ionizing]

The Soviet microwave bombardment apparently making people in our Moscow embassy sick with radiation is the tip. For the iceberg, read Paul Brodeur's stunning articles, "A Reporter at Large (Microwaves)," in the Dec. 13 and 20 New Yorkers. They'll leave you sick with rage.

About microwaves: they come from television transmitters, radars, microwave ovens and much else; they touch millions of Americans, especially in cities; their possible hazards to human health were little investigated in this country until recently; the established hazards are scary, the possible ones more so.

Ho hum, you may say, a familiar contemporary tale. What's new is Brodeur's demonstration that it spins out of the cold war.

In and after the Second War, microwave development came to encompass a range of goods and services now considered integral to the American life style, and the detection and guidance systems critical to national defense. Since microwaves were thought merely to heat tissue (diathermy), virtually no thought was given to health risks. A safety standard of ten milliwatts of exposure per square centimeter was adopted by military and industry alike.

Meanwhile, the Russians, who unlike the Americans had been making extensive clinical investigations of sick mi-

crowave workers, had established a standard of ten microwatts: one-thousandth as much. But because American researchers tended to disapprove of Soviet biological theory and experimental practice, because translations were inadequate and because they assumed the only biological effect was heating tissue, they found little to fret about.

The Pentagon, financing virtually all their research, preferred it that way. It ordered researchers to ensure safety "at the least possible cost to military operations." Over-the-standard leakages at guided-missile installations were passed over. A maverick ophthalmologist, Dr. Milton M. Zaret, who had been finding that microwaves really hurt people (cataracts, for instance), lost his Defense Department contract. Biophysicist Allan H. Frey, doing pioneer research on the effects of microwaves on the nervous system, was laughed at.

The unraveling began only in 1962 with discovery of the "Moscow Signal"—the embassy bombardment. Most embassy workers, deemed not to have a "need to know," were kept in the dark. The U.S. conducted secret studies to see if there were biological and even genetic effects. Columnist Jack Anderson caused a flurry, but only a flurry, by breaking part of the story in 1972. "Curiously," says Brodeur, no one sought to refute Anderson's claim that the Russians were trying to alter the

minds and behavior of American diplomats.

Zaret, by the way, reading that Finns living in two southeastern districts were inexplicably experiencing the world's highest rate of heart attacks, suggested to an international microwave conference that powerful Russian missile-detecting radars might be a factor: the closer to the border, the more heart attacks. The conference, in Warsaw, received him in silence.

From Moscow last February came word that the embassy was again under bombardment—in doses even higher than the permissive American exposure standard. The ambassador himself reportedly suffered nausea and bleeding in the eyes. There followed a series of flabby, often misleading State Department representations of which the latest was issued Wednesday. A department doctor, a veteran of the official microwave coverup of the 1960s, said he was "absolutely sure" there was "no connection" between certain blood changes recorded in embassy personnel and microwaves.

In fact, the embassy radiation is the easy part. Presidents Nixon and Ford and Henry Kissinger cravenly let the Russians go on assaulting the health and wellbeing of Americans in Moscow. President-elect Carter and Cyrus Vance should demand that the Russians end the bombardment. If the Russians chose not to, the United States should

close its embassy and the Russians' here, dose the Russian embassy with the same poison—something like that. No more sighing.

As for the broader problem of how to cope with a hazardous new technology before its use becomes pervasive and therefore perhaps prohibitively difficult to end, Brodeur is surely right in appealing for a "free and enlightened scientific community" uncoopted and uncorrupted by the official mentality.

What might have happened, he speculates, "if, instead of scorning mavericks like Zaret, laughing at pioneers like Frey, succumbing to the military's Cold War outlook, and worrying about possible misinterpretations by the press, the scientific community had undertaken to follow the Soviet lead and had seriously studied the biological effects of microwave radiation fifteen or twenty years ago, when the first disconcerting signs appeared."

At best, he concludes, the public might have asserted much earlier "its inalienable right to know, and to question the conspiracy of silence about the potential hazards of microwave radiation—a policy that the government was able to maintain for years on the very basis that the public, according to the parlance employed by military and intelligence people in matters deemed to involve security, had 'no need to know'."