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Soviet Microwave Work Cited

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 Associated Press

A Defense Intelligence Agency report says extensive Soviet research into microwaves might lead to methods for causing disoriented human behavior, nerve disorders or even heart attacks.

"Soviet scientists are fully aware of the biological effects of low-level microwave radiation which might have offensive weapons application," says the report, based on an analysis of experiments conducted in the Soviet Union and Eastern Europe.

This research work suggests "the potential for the development of a number of antipersonnel applications," the study says.

Microwave beams are the electronic basis of radar and are used for relaying long-distance telephone calls. Other common sources of microwaves include television transmitters.

A copy of the study was provided by DIA to The Associated Press in response to a request under the Freedom of Information Act. The agency refused to release some portions of the study, saying they remain classified.

According to the Pentagon analysis,

Soviet researchers have found that persons exposed to low-level microwave radiation "experience more neurological, cardiovascular and hemodynamic [blood circulation] disturbances than do their unexposed counterparts."

It said persons exposed to microwaves tend to complain more frequently of subjective conditions including "headache, fatigue, perspiring, dizziness, menstrual disorders, irritability, agitation, tension, drowsiness, sleeplessness, depression, anxiety, forgetfulness and lack of concentration."

The report made no direct mention of the Soviet microwave bombardment of the U.S. embassy in Moscow, where, despite strong American protests, the radiation continues, though at reduced levels.

State Department spokesmen insist that medical tests of embassy personnel have found no adverse health effects attributable to the microwaves.

The Soviets have denied beaming any radiation at the embassy.

The DIA report, distributed within the government last March, said that one biological effect that could offer antipersonnel uses is the phenomenon known as "microwave hearing."

"Sounds and possibly even words which appear to be originating intracranially [within the head] can be induced by signal modulation at very low average power densities," the study said. It added that "combinations of frequencies and other signal characteristics to produce other neurological effects may be feasible in several years."

The report concluded that Soviet research in this area "has great potential for development into a system for disorienting or disrupting the behavior patterns of military or diplomatic personnel; it could be used equally as well as an interrogation tool."

The report said that, along with microwave hearing, the Soviets also have studied various changes in body chemistry and brain function resulting from exposure to microwaves and other frequencies of electromagnetic radiation.

"One physiological effect which has been demonstrated is heart seizure," the report said.

It said that this has been accomplished experimentally in frogs by synchronizing the pulses of a microwave signal with the animal's heartbeat and beaming the radiation at the chest area.