



United States Department of Defense

## News Release

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**IMMEDIATE RELEASE**

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### **PENTAGON PLANS TEST OF ATMOSPHERIC DISPERSION**

The Department of Defense announced today that an atmospheric dispersion survey will be held in and around the Pentagon from April 19 to May 15, 2004. The survey will advance knowledge about the weather conditions and movement of simulated airborne contaminants around and inside the Pentagon. The resulting data will be used to improve, refine and verify a computer model that simulates the atmospheric transport of potential contaminants around the Pentagon.

Knowledge gained about the airflow around the Pentagon, and the associated transport of gases and their infiltration into the building, will allow the development of improved systems for protecting other Department of Defense facilities.

The survey, which is being called exercise Pentagon Shield, will use a large array of sensors to measure temperature, wind speeds, wind directions, and other specialized measurements to aid development of an advanced chemical and biological protection system for the Pentagon and its occupants. The Pentagon Shield exercise is sponsored by the Defense Advanced Research Projects Agency and the Pentagon Force Protection Agency.

The sensors being used are standard weather sensors and include battery-powered wind sensors mounted on light poles around the Pentagon, on the building roof, and in the courtyard. A large, 100-foot tower mounted with weather sensors will be located to the southwest of the Pentagon building, on Arlington Cemetery property. A 30-foot by 10-foot blimp will be parked in South Parking and flown mostly during the nighttime hours to measure the winds at various heights. Two long-range laser-based sensors will be placed on the grounds of the Navy Annex to measure winds around the entire Pentagon reservation.

During the exercise, a safe, non-toxic, colorless, odorless gas will be released over a three-day period within the first two weeks of May. The tracer gas will simulate how chemical or biological agents would flow around and into the Pentagon. The tracer gas being used is sulfur hexafluoride, SF<sub>6</sub>, which is completely safe and commonly used in airflow testing. The gas also is approved by the Food and Drug Administration for injection into the body for specialized tests due to its safe properties.

The actual test days are dependent upon suitable weather conditions but should occur sometime during the first two weeks of May. The majority of testing is scheduled to occur over the weekend but some releases may occur during weekdays.

The tracer testing protocol being followed is standard and has been used in other locations. The protocol for the Pentagon exercise has been reviewed by the Environmental Protection Agency and the Virginia Department of Environmental Quality.

All sensors will be clearly marked as part of the Pentagon Shield exercise and should not be touched or moved. Additionally, all Pentagon Shield exercise participants will be wearing bright green safety vests and black caps with the Pentagon Shield logo and have picture identification badges.

Major participants in exercise Pentagon Shield are: National Center for Atmospheric Research, Field Research Division of the Air Resources Laboratory of the National Oceanic and Atmospheric Administration, U.S. Army Dugway Proving Ground, and the University of Colorado.

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