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WEATHER MODIFICATION, Inc.

ATMOSPHERIC RESOURCES MANAGEMENT TECHNOLOGIES
FOR THE 21ST CENTURY

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CUSTOM SEEDING EQUIPMENT

In addition to the various airborne and ground-based seeding apparatus shown on this site, WMI also custom installs special purpose release equipment. A few examples are described below.

Tracer Gas Releases

On several occasions, WMI has rigged aircraft to dispense tracer gases. These gases are used in transport studies, to track the progress of pollutants or seeding agents. The gas most commonly used for this purpose is hexafluoride (SF₆) an inert gas not found in nature.

The WMI gas dispensing system includes the rack for the bottle(s) of pressurized gases, the plumbing connected through the aircraft pressure bulkhead to the free atmosphere, and the attendant gauges to indicate the remaining in the bottle(s), and the flow rate. In addition, such systems are interfaced with the aircraft data system so a flag is set indicating that a release is in progress.

Ice Nucleating Proteins

Some proteins, such as **Snomax™** (manufactured by **York International**), are effective at nucleating ice at low temperatures. The Snomax™ is a fine dry powder, and must be augered from a hopper within the aircraft. A little bit goes a long way, so dispensation has to be slow. WMI has installed and used small hoppers for many years to achieve the needed seeding rate. Again, the hopper can be interfaced with an on-board data system to program releases.

Fluorescent Beads

One never knows what science will require. Thus, when a scientist at the National Center for Atmospheric Research came up with a plan to instantly release millions of tiny fluorescent beads into maturing cumulus clouds, WMI had the means to do it.

About 40 pounds of the tiny plastic beads had to be released within just few seconds, so the hoppers used for Snomax™ wouldn't work. WMI installed a special hopper in the release aircraft that emptied within just a few seconds, allowing the full load of beads to be dropped into a single cloud turret. All of the releases were conducted with

Dropsondes

WMI has also released dropsondes (see [BAMEX](#)). For additional information see the [atmospheric research](#) |

Whatever your release needs, WMI has the answer, or can readily design, build, and install the equipment you

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