

Home

Cloud Seeding Technology

Equipment

Seeding Methods

Congressional Activities

FAQs

Meetings

Membership

News

Organization

Policy Statements

Reports

Research

Links

Contact Us

Cloud Seeding Technology: Equipment

Equipment



Silver lodide ground generators release microscopic particles in or below cloud base which act as a nucleus for ice crystals to form, spurring precipitation development.

Ground Generator



on summer cloudseeding programs and a few winter programs. They are operated either directly below cloud in the updraft, or in-cloud usually during winter operations in less turbulent conditions.

Airplane-mounted seeding generators are used primarily

Wing-tip seeding generator



Burn-in-place, or end-burning flares emit a fine silver iodide smoke similar to that from ground-based or wing-tip mounted generators.



End-burning flares

Gound-based propane generators work by virtue of propane's extremely cold temperature. They instantly condense and freeze liquid water droplets in super-cooled clouds.

Propane generator



Hygroscopic flares like these are used in a similar fashion to silver iodide flares, but supply clouds with condensation nuclei to grow raindrops without the need for a freezing process.

Hygroscopic flares



Dry ice pellets

Dry ice pellets are used on some cloud seeding programs. They are typically dropped by airplanes in convective clouds during summer seeding programs to induce ice formation earlier than it would occur naturally. They act differently than silver iodide particles as they freeze supercooled droplets via thermal shock instead of providing a crystalline nucleus. To see a demonstration of how dry ice seeding works, go to the Seeding Methods section on this web site.

