WEATHER MODIFICATION SYSTEM

COMPLEX OF MEANS AND TECHNOLOGY FOR DESIGN AND MODIFICATION OF THE ATMOSPHERIC SITUATION ON A GIVEN TERRITORY

Advanced Synoptic Technologies company is engaged in theoretic development, manufacture and subsequent practical employment of state-of-the-art technologies for local influence on atmospheric processes in the professional services market segment.

The system of influencing the atmospheric process has been developed around the idea of a rational product that meets the requirements imposed on the advanced technologies in this area:

- urgent need
- environmental safety
- optimal power consumption
- high cost effectiveness
- fast deployment and commissioning
- reliability, flexibility and simple in use

With the above principles in mind, the experts of the ASTech Company have developed a theoretical basis and the equipment which constitute the complex of means for modification of the atmospheric situation on a given territory. This complex of means is referred to as the ***Influence on the Local Atmospheric Processes (ILAP) Technology***.

Relevance of ILAP Technology

Statistics collected by scientists lead us to conclude that weather and climate have a considerable effect upon economics and social processes in human society. Indexes of effectiveness in many industrial branches, in agro industrial sector and in business depend directly upon climatic conditions in any region of the globe. Just some examples:

- One time-out day of an international airport due to adverse weather situation and, consequently, limitation or prohibition as regards take-off and landing will result in an aggregate loss amounting to several hundred of thousands of USD.
- In many countries, the swing in harvest because of weather runs up to and even exceeds 30%. Weather changes also badly affect the cultivated crops quality.
- The unreasoned and destructive human activity in conjunction with heavy weather conditions figures in some cases as a “natural catalytic agent” to impair a local ecological situation. This is the cause of such processes as, for instance, drought and soil mineralization which, in its turn, may account for irrecoverable loss of flora and fauna of the problem region.
- Issues of the day remain drought-affected and fire-risk areas, fogs control in seaport zones, on motor roads and railways, deterioration of ecological situation in cities due to gas contamination and harmful substances in the air.

Obviously, the technology capable of many of the above challenges in the shortest possible time and at relatively low costs will be greatly demanded by business and society.

Purpose and Fields of Application

Based on results of long-term investigation of atmospheric process algorithms, and on theoretical footing of the system for controlling atmospheric situation on a given territory, one should define basic lines of what the equipment is designed for and where it may be used.

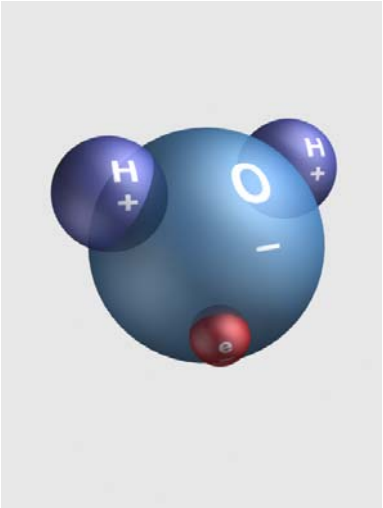
Purpose

- Inducement of **atmospheric precipitation** in relevant regions.
- Increase of **atmospheric precipitation** intensity.
- Destruction of **cloudiness** (creation of fine sunny weather).
- Destruction of **fog** and its prevention.
- Elimination of **smog** in cities, open industrial installations, open pit mines etc.

Fields of Application

- **Agriculture** (prevention of hail, timely watering, termination or reduction of precipitation in time of harvesting).
- **Water supply** for cities, regions (retention or increase of the required level in water-storage reservoirs or water scoops).
- **Aviation** and **marine navigation** (upkeep of the required visibility ranges and cloud base).
- **Forest fire fighting** (inducement of atmospheric precipitation or increase of its intensity).
- **Social and sporting events, festivals, air shows** etc. (destruction of cloudiness and creation of fine weather).
- **Environmental protection support** (soil salinization and soil drought prevention or reduction)

Influence on the Local Atmospheric Processes Technology



The key element on which our technology is based are the negative ions. **Ion** (Greek, present participle of ***ienai***, "**to go**") is an electrically charged atom or group of atoms the electrical charge of which results when a neutral atom or group of atoms loses or gains one or more electrons (or other electrically charged particles). The loss of electrons results in a positively charged atom, and the gain of electrons in a negatively charged atom. Atoms (as well as molecules) acquired an electric charge are called "ions".

The natural environment contains both positive (hydrogenic) and negative (oxygenic) ions. Ions with different polarity are attracting to each other attempting to create an electrically neutral compound.