



2500 DEATHS !!!

IN AIRPLANE ACCIDENTS CAUSED BY FOG IN THE LAST 25 YEARS



WHAT IS **FOG** ?

CAUSES OF **FOG** FORMATION

Fog: Fog begins to form when water vapor condenses into tiny liquid water droplets suspended in the air. These droplets scatter light in all directions thereby limiting the visibility. In other words, the fog is a low-lying cloud, the base of which touches the earth surface. The weather stations around the world indicate the presence of fog when the visibility is reduced to less than 100m. There are two main fog formation mechanisms:

Radiation fog (fig.1): is formed by the cooling of land after sunset (by thermal radiation) in calm conditions with clear sky. The cool ground produces condensation in the nearby air by heat conduction. In perfect calm the fog layer can be less than a meter deep but turbulence can promote a thicker layer up to 300 meters. The absence of wind favors the formation of fog and the persistence of the phenomenon for several hours over a particular geographic area. Radiation fogs occur at night and usually do not last long after sunrise. It most common in autumn and early winter, whereas is more easily formatted over the countryside than in the urban environment.

Advection fog (fig.2): occurs when moist air passes over a cool surface by advection (wind) and is cooled. It is common as a warm front passes over an area with significant snow-pack. It is most common at the sea when moist air encounters cooler waters, including areas of cold water upwelling.

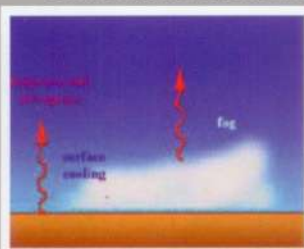


Fig.1 Radiation fog formation

Information and photos from the
NATIONAL OBSERVATORY OF ATHENS

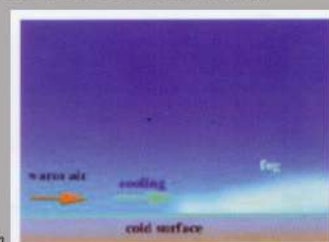


Fig.2 Advection fog formation



WIND+SOL Ltd (estab. 1977)

INTERNATIONAL INNOVATION



News Release

November 2017

For the second year, Wind+Sol is the only Greek company that participated in the international exhibitions iENA and InnoTRANS in Germany.

In November 2017, Wind+Sol took part in the exhibition iENA in Nuremberg, Germany, among approximately 700 exhibitors from 30 countries, and 12.000 visitors. This exhibition is where innovative technology, products and inventions are presented by their creators. **Wind+Sol presented its invention called AIR-ANTIFOG. It is a technology to prevent the phenomenon of FOG in airports, highways etc. AIR-ANTIFOG is patented worldwide. In iENA it was awarded the Honour Award, as the best invention of 2017.**

In November 2016 Wind+Sol participated in the Innotrans exhibition that takes place in Berlin, among 2950 exhibitors from 60 countries. InnoTrans is the leading international trade fair for transport technology, sub-divided into Railway Technology, Railway Infrastructure, Public Transport, Interiors and Tunnel Construction. **Wind+Sol presented the special electro turbine that it developed and built: ShockWave ElectroTurbine (SWET), aiming to transform the energy caused by passing-by vehicles (ground and underground, such as trains, subway etc) into electric energy. The SWET can function horizontally and vertically. When placed on the ground, it also transforms the natural wind in addition to the shockwave that the vehicles cause. Wind+Sol has received the worldwide patent for this invention as well.**

These two innovations by mech. engineer Chr. Vouros are the result of his **40-year-old activity** in the area of the natural environment and the renewable energy sources, and they are not his only creations. In the past he has developed the electrical Antifrost Wind Machine with a third movement, which protects arable farms, as well as wind generators of power up to 50 kW, with important innovative applications.



The inventor Chris Vouros being awarded.



The booth of WIND+SOL in iENA 2017



The award

