We describe a Geophysical Weapon, possibly recently developed by Russia, which can produce a localized depressurization in the Earth’s atmosphere. By using ELF radiation produced at the ionosphere by means of the HF heating, it is possible to reduce the atmospheric pressure in a given region of the Earth. The rarefied air may lead people to loss of consciousness and the deep sleep, which culminates with death. Such as occurs in an aircraft at high altitude, when the cabin is suddenly depressurized, and the pressurization system does not work. In some minutes occur the deaths of the aircraft passengers. Thus, by using this sleep weapon it is possible to exterminate millions people in less than one hour.

Key words: Physics of the ionosphere, HF heating of the ionosphere, ELF waves, Geophysical Weapons, Sleep Weapons.

A top Duma political leader, called Vladimir Zhirinovsky (leader of the Liberal Democratic Party of Russia (LDPR)) said in a television interview that Russia has a new technology to “destroy any part of the planet” and kill over a hundred million people using secret Geophysical Weapons [1]. Zhirinovsky cited Russia’s supremacy in space and stated that the country had, “Lots of money, resources, and new weapons that no one knows about.”

“With them we will destroy any part of the planet within 15 minutes,” he sensationally warned.

“Not an explosion, not a ray burst, not some kind of laser, not lightning, but a quiet and peaceful weapon,” added Zhirinovsky, warning that

“whole continents will be put to sleep forever” and that “120 million will die”. In 1997 speaking to the University of Georgia, Athens, then US Secretary of Defense William Cohen said of the threat of an “eco-type of terrorism whereby they can alter the climate, set off earthquakes, volcanoes remotely through the use of electromagnetic waves.”

For many years, suspicions have circulated around the purpose of the High Frequency Active Auroral Research Program (HAARP), an ionospheric research program jointly funded by the US Air Force, the US Navy and DARPA.

In 1974, it was shown that ELF waves can be generated by heating the ionosphere with high-frequency (HF) radiation in the megahertz range [2]. This heating modulates the electron’s temperature in the ionosphere, leading to modulated conductivity and a time-varying current, which then radiates at the modulation frequency.

Several HF ionospheric heaters have been built in the course of the latest decades in order to study the ELF waves produced by the heating of the ionosphere with HF radiation. Currently, the HAARP heater is one of the most powerful ionospheric heaters [3, 4].

In a previous paper [5], we have shown that, by using ELF radiation produced at the ionosphere, by means of the HF heating, it is possible to produce a localized depressurization in the Earth’s atmosphere.

Thus, by adjusting conveniently the irradiation angles ($\alpha$, $\beta$) of a HF antenna array (See Fig.1 (a)), it is possible, for example, to produce fluxes of ELF radiation having a diameter of ~300 km (or more) on the Earth’s surface. These fluxes will then produce a strong depressurization in the atmosphere at these regions.

The Physics of ionospheric radio wave refraction [6] shows that HF radio waves can propagate for more than 3,000km (night) around the Earth. However, the intensity of the HF radiation decreases at each refraction in the ionosphere. Therefore, in practice, the same level of depressurization only can be maintained up to a small number of ionospheric refractions (Possibly only 5). This can produce a depressurization region with ~300 km x ~1,500 km upon the Earth’s surface (See Fig. 1 (b)).

Figure 2 (a) shows the HF antenna array upon a mobile naval platform, which is able to hit the targets in several regions in the World. For example, part of the U.S.A and Europe (See Figs. 2 (b) and (c)).

With the air strongly rarefied, people in these regions will have initially loss of consciousness; they fall asleep and posteriorly they die. Similarly as occurs in an aircraft at high altitude, when the cabin is suddenly depressurized and the pressurization system does not work. If the aircraft does not slow down the flight altitude, then in some minutes can occur the deaths of the aircraft passengers [7]. Thus, by using this sleep weapon it is possible to exterminate millions people in less than one hour. Such as predicted by Zhirinovsky. Only relativistic kinetic projectile shown in a previous paper [8], with specific kinetic energy of $\sim 10^{8} J/kg$ ($\sim 10$ Megatons/kg), can produce similar destruction.
Fig. 1 – Schematic diagram of propagation of the HF radiation, and of the ELF radiation generated at the ionosphere. (a) HF antenna positioned in order to obtain incidence areas of ELF radiation with ~300km diameter in the ground. (b) The rectangle with ~300km x ~1500km limits the region of depressurization produced by one HF antenna.
Fig. 2 - (a) The system for heating the ionosphere (Starting from the sea). (b) Possible region to be depressurized in an attack to USA. (c) Possible region to be depressurized in an attack to Europe.
References


