

Subject: Emailing: Nicholas Christofilos.htm

From: Rosalind Peterson <info@californiaskywatch.com>

Date: 9/24/2011 8:47 AM

To: "INFO >> Rosalind Peterson" <info@californiaskywatch.com>

— Nicholas Christofilos.htm —

Nicholas Constantine Christofilos

Michael Lahanas

Griechische Wissenschaftler



[Another image](#)

Nicholas Constantine Christofilos (Νικόλαος Χριστοφίλου) (16.12.1916 – 24.9.1972) Greek-American physicist. Similar as Nikola Tesla he was an amazing personality. He was born in Boston, USA and raised in Greece. Christofilos was working for an Athens elevator company when he became interested in high-energy particle physics. He worked on large scale projects mainly for military purposes. His strong focusing principle that was found by others later independently reduces the dimension and costs of accelerators necessary to achieve beams of a given energy. With this principle more energetic beams allowed to increase our knowledge of the fundamental constituents of the world. Other ideas of Christofilos that have been realized are antennas of almost continental dimensions using millions of Watts to produce extreme low frequency waves for submarine communication, or the generation of Van Allen Belt like artificial radiation belts formed by explosions of hydrogen nuclear bombs in the upper atmosphere, that also can produce electromagnetic short intense pulses able to destroy all electronic devices over a very large area. The radiation could destroy Soviet satellites in orbit and disturb the majority of military communication carried over HF and VHF radio frequency bands.



Greek Newspaper that claims that the autodidact nuclear scientist Christofilos found a method to transform matter into energy. The Journal *Life* calls Christofilos „**The Crazy Greek**“ for his ideas. (William Trombley, “Triumph is Space for a ‘Crazy Greek’”, *Life* (March 30, 1959), pp. 31-34.)

Strong Focusing (alternating gradients)

The first inventor of this method was the Greek **Nicholas Christofilos** who had had this idea patented in March 1950. However, it was not accepted and published until February 28, 1956. He worked for Westinghouse.

The avocation of the Greek elevator engineer was the study of particle motion in magnetic fields. Pursuing those studies he discovered "strong focusing," now a widely-used method of controlling beams of energetic ions in accelerators. He communicated this to scientists in the US, but received little attention until the principle was independently

re-discovered. In 1952 it was reinvented independently by Ernest Courant, Livingston, and Hartland Snyder. Conventional wisdom says that a magnetic lens to focus particles both horizontally and vertically cannot be constructed—in contrast to optical lenses, which can. But the principle of strong focusing showed that, while a magnetic lens indeed focuses in one plane and defocuses in the orthogonal plane, if two such lenses are separated along the beam path, then their net effect is to focus in both planes simultaneously. This breakthrough made it possible to squeeze beams in circular (and also linear!) accelerators to much tighter dimensions, thus reducing magnetic field volumes and therefore costs. People at Berkeley found Christofilos' paper in their files. They had examined it superficially and dismissed it as one of the many crackpot letters that laboratories get. Courant and Livingston published a letter in the *Physical Review* acknowledging Christofilos's priority. An agreement was reached with the AEC whereby Christofilos received a substantial payment, and he was hired to join the Brookhaven staff.

Astron

Nicholas Christofilos, one of the most original thinkers in physics of his generation, was pursuing a magnetic fusion concept, Astron. According to T. K. Fowler the Astron idea is: [confining a plasma within the magnetic field produced by an intense circulating electron beam \(the E-layer\). The E-layer electrons were used to heat the plasma to reach thermonuclear ignition temperatures.](#) The Astron would be then a device that produces electric power from thermonuclear reactions.

Astron required the invention of a new kind of electron accelerator, the induction linear accelerator (or induction linac), to produce an intense circulating electron beam to magnetically confine and heat a plasma. Induction linacs are now the heart of the nation's two modern hydrodynamic testing facilities, the Contained Firing Facility at Site 300 and the Dual Axis Radiographic Hydrodynamic Test Facility (DARHT) at Los Alamos. They are used to generate the powerful X ray flashes needed to photograph mock nuclear-weapon primaries as they implode.

Project Argus

Today, the right kind of nuclear detonation would threaten hundreds of satellites. That is because of something called the "[Christofilos Effect](#)," named after Nicholas Christofilos, the physicist who predicted it. In short, a blast just outside the earth's atmosphere (which ends about 60 miles above sea level) would produce enough artificial radiation to blanket the globe in the space where about 250 low-earth orbit satellites operate. Some would fail immediately. Over the course of several weeks, this radiation would drastically shorten the lives of all the others.

Christofilos worked on various aspects of magnetic trapping of particles, in particular the trapping of plasma in devices intended to release fusion energy (see [plasma](#)).

As a grand experiment he proposed in October 1957 to the US Air Force to launch rockets with small atomic bombs, and detonate them in space. Atomic bombs produce large numbers of energetic electrons, and Christofilos hoped that such electrons would become trapped in the magnetic field as an artificial radiation belt.

That project, conducted in secrecy and code-named Argus, received a great boost when Van Allen's Explorers 1 and 3 discovered the natural radiation belt, and it was carried out above the Southern Atlantic in August and September 1958. Three bombs were exploded outside the atmosphere, above a deserted stretch of ocean, and the public only learned about it the following year, when many related scientific studies were published.

The bombs indeed produced many high-energy electrons. Some of these were guided upwards along magnetic field lines, followed those lines across the equator and came down again near the Azores islands, where a remarkable artificial aurora was seen, in a region where no auroras had ever been observed before. Other electrons mirrored above the atmosphere and stayed trapped, creating artificial radiation belts which gradually decayed in the matter of weeks. The new belts were studied by the satellite Explorer 4, built for this purpose by Van Allen's group at the University of Iowa.

· A **collection of articles** on project "Argus" appeared in the *Journal of Geophysical Research*, vol. 64, August 1959. It is headed by an overview by N. Christofilos (p. 869) and a report on the observations of Explorer 4, by James Van Allen, Carl McIlwain and George Ludwig (p. 877).

· The **obituary** of Nicholas Christofilos appeared in *Physics Today*, January 1973.

Extreme low Frequency Waves (ELF) by Paul Brodeur (*Currents of Death*)

The US Navy was interested in ELF radiation since 1958, when it became clear that radio waves oscillating above the 60 Hz range could penetrate seawater sufficiently to provide communication with deeply submerged submarines. Because the wavelength of such a signal is nearly 2500 miles, it was feared at the time that ELF

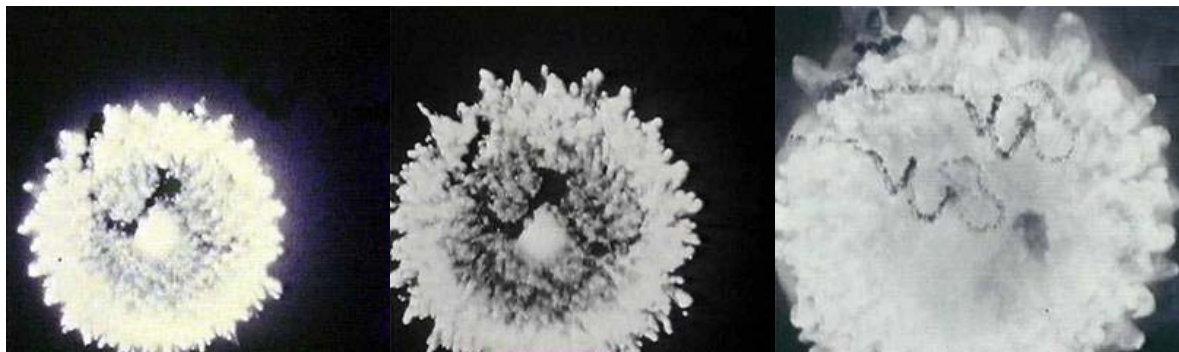
transmitting antennas would have to be unduly large. This problem was solved, however, by Nicholas Christofilos working for the Department of Defense, who suggested that a portion of the earth's interior could be used as a launching pad to propagate ELF signals. During the early 1960s, Christofilos concept was successfully tested, and in 1969 the Navy and the RCA Corporation built an ELF test facility near Clam Lake, Wisconsin, by burying twenty-eight miles of insulated cable in the low-conductivity granite bedrock of the Chequamegon National Forest. Soon thereafter, the Navy proposed to construct a 22500-square-mile antenna system [by] burying 6000 miles of cable in bedrock elsewhere in Northern Wisconsin and in the Upper Peninsula of Michigan. The idea was to form a giant grid so that electric current generated by transmitters would pass through the antenna cables and flow deep into the earth along the bedrock, creating a global ELF *radio* field [NB: *it would certainly be an electromagnetic wave, but definitely not a "radio" wave!*] extending up to the ionosphere [which] would reflect a portion of the ELF field into the world's seas and oceans.

Project Sanguine would have made use of some two-fifths of Wisconsin in the construction of a giant ELF transmitter capable of being heard all over the world. A committee set up to investigate possible biological effects vetoed the concept. A new variant, Project Seafarer, was next proposed but not approved. Finally, Project ELF was approved and can broadcast at frequencies between 30 Hz to 300 Hz. It consists of two transmitters, one near Clam Lake in Northern Wisconsin, and the other at Republic, in Michigan's Upper Peninsula. (Actually, Michigan's antenna intersection is located east of Republic, while the transmitter site is in the Gwinn area nearby, with no settlements of any size between the two towns.) The Michigan and Wisconsin sites, separated by 145 miles as the crow flies, must operate simultaneously to meet worldwide coverage requirements. One of the great difficulties associated with the use of ELF for communication purposes, is the problem of generating a useful signal. The physical size of an antenna that can produce a useable signal with reasonable efficiency is inversely proportional to the frequency. The Wisconsin antenna consists of two lines, each about 14 miles long. The Michigan antenna uses three lines, two about 14 miles long and one roughly 28 miles long. Originally, the antennas were to be buried 6 feet underground, but reasons of economy dictated otherwise. The antennas that were actually built look like a power line, mounted on 40-foot wooden poles with a transmitter building near each antenna system. The transmitter facility in Michigan uses about six acres of land and the one in Wisconsin, deep in the Chequamegon National Forest, about two acres. A 165-mile underground cable connects the two sites which have a typical operating frequency of 76 Hz. Due to its low frequency, the antenna systems is huge: a directly-generated electromagnetic wave at 76 Hz has a wavelength of 2452 miles. The very first ELF transmission from Clam Lake (an old Navy facility built years before Michigan's site) took place in May 1982, when a message was successfully received by a submarine submerged at a depth of 400 feet in the Atlantic Ocean off the Florida coast. Millions of watts are transformed into a 2452-mile long wave that turns the Laurentian granite bedrock of Lake Superior into a massive antenna for deep sea contact with the submarine fleet. The efficiency of these transmitters is very poor, and a large amount of energy is wasted as heat.

Project Starfish

The USA exploded massive hydrogen bombs high in the atmosphere to "test" nuclear-war scenarios.

They exploded a 1.4 Mega Ton bomb "Starfish" 400km above the Johnston atoll in the Pacific Ocean. It made day out of night and cause auroras which were visible at the equator. It destroyed telephone communications in Hawaii and some say seeing the flash in New Zealand. It took earth's magnetic field 10 years to return to normal.





The most magnificent man made aurora has been produced - by the US army. In August 1958 the US Navy detonated two hydrogen bombs over Johnston Island in the Pacific. They were part of a test series under the name Operation Hardtack I. Only few days' later secret tests of 3 high altitude nuclear explosions in an altitude range from 100 up to 446 miles were executed under the code name Project Argus. It was designed by the US Department of Defense and the US Atomic Energy Commission [1]. The motivation for this secret series was a theory developed by the brilliant but eccentric physicist Nicholas Christofilos at Lawrence Radiation Laboratory (LRL). He had predicted that military significant effects would be produced by injecting charged particles from nuclear explosions into near space to create artificial Van Allen belts. This series sought to prove (or disprove) his theory by actually creating such a belt. The tests essentially confirmed his predictions. The military called the operation the »biggest scientific experiment ever undertaken«.

It is assumed that the injected particles traveled along the magnetic force lines causing artificial aurora when striking the atmosphere near auroral zones.

The two high altitude tests under Operation Hardtack I were rather designed for testing the weapon effect of Anti-Ballistic Missiles and were equipped with a 1,7 Mt. warhead. On August 1 the test with code name TEAK was scheduled. The explosion at an altitude of 160 km (85 km is given in another source) created an artificial aurora at Apia, Western Samoa, 2.200 miles away from Johnston Island.

The scientific world was not informed about the detonation, at least not the observer in charge at Apia Observatory, Mr. J. G. Keys. He witnessed a manifestation which he believed to be a display of the aurora australis. The occurrence of an auroral display in the tropics is always of unusual interest because of its exceeding rarity. The aurora has been reported at Apia (13°48'S:171°46'W) on one occasion only, and then only in association with the severe magnetic storm of May 13-16, 1921.

Mr. Keys description of the manifestation is as follows:

The display was first observed on August 1 at 10:51 GMT with bright rays in the western sky with an altitude of 12°. On the bearing of 235° the rays disappeared behind coconut trees. This manifestation persisted for about 6 minutes, and then gradually diminished to a red glow. This glow faded completely at 11:05 GMT. The rays were at first violet, covered with reds and gradually changed to greens. There was a crimson arc with centre elevation 32° on a bearing of 340° and this gradually faded. Three or four red bands were seen with their centers approximately due south at an elevation of about 30-40°, and these faded rapidly. The night sky was clear with one-eighth cumulus cloud at 2.500 ft. and the moon was just past full. [2]

When the readings at the normal and rapid run magnetometers of the Apia observatory were compared with the readings of other magnetic stations, it became evident, that in the time of question no major magnetic disturbance was recorded worldwide so that the K-index of 6 for the period 9:00-12:00 GMT at Apia must be determined as a local phenomenon. The unusual location of the manifestation (rays were seen in western skies and a crimson arc in northern direction) gave further doubt of a natural manifestation of aurora australis. When newspaper reported the tests at Johnston Island the explanation for the strange observations at Apia was detected. Few weeks later an article in NATURE by A. L. Cullington suggested the idea that the aurora at Apia was caused by the high altitude nuclear explosion.

In a communication in NATURE following the report of Mr. Cullington, Fowler and Waddington provided an explanation for the coherence of both events. It was calculated that Johnston Island and a region north-west of Apia lying on the same line of force. Further it was established, that the electrons produced in a nuclear explosion have beta-ray decay energies up to a few million electron-volts and are able to escape from the point of detonation and on their return to the atmosphere produce effects at relative low altitudes. The long duration of the phenomenon was explained by the co action of two mechanisms: the average lifetime of nuclei produced in nuclear explosions which decays by beta-emission is of the order of minutes, and large numbers of atoms in the upper atmosphere over Apia must have been excited to metastable states which decayed with appreciable life-times.

Both scientists were rather enthusiastic about the possibilities of high altitudes nuclear explosions tests, and they suggested further experiments:

»The demonstration of the possibility of producing aurora artificially at once suggests the great interest that would be attached to studying the effects of any high altitude nuclear explosions in the auroral belt or elsewhere at still higher altitudes...« [3]

Apia is the capital of Western Samoa, on the northern coast of Upolu island. Robert Louis Stevenson is buried on a hill overlooking the city.

Another sequence of artificially produced auroras appeared in conjunction with operation »Dominic«, a series of 36 atmospheric nuclear detonations in the vicinity of Christmas Island and Johnston Island. 8 of the tests were scheduled as high altitude explosions above 100.000 feet launched by THOR rockets from Johnston Island. After two unsuccessful launches a third THOR had been delivered and was configured with a 1.450 kt Starfish device (W-49 warhead and the MK-4RV). On July 9th 1962 at 9.00 the rocket lifted off and roared to an altitude of 248 miles where the warhead was released and detonated. An artificial aurora was visible for seven minutes. An electromagnetic impulse sent power line surges throughout Oahu knocking out street lighting, blowing fuzzes and circuit breakers, and triggering burglar alarms. It was the highest altitude test and the second largest warhead detonated during the Johnston Island portion of Operation Dominic. The experiments seriously disturbed the Van Allen belt, altering its shape and intensity. The artificial produced aurora was anticipated as »a dome of polar light visible from Los Angeles«. On 19 July NASA announced that as a consequence of the high altitude nuclear test of July 9 a new radiation belt had been formed, stretching from a height of about 400 km to 1.600 km.

After a series of disastrous failures including the complete destruction of Johnston Islands launching pad and the crash of radioactive debris from the failed launch on to the island, Johnston Island had to be cleaned up completely, before the series could commence.

Bluegill Triple Prime on 26 October 1962 led to a 1.000 kt warhead detonation at an altitude of 31 miles. The burst happened low enough in the atmosphere for fireball formation to occur, and observers saw a brilliant white flash. A slightly distorted bright moon-like sphere was seen, yellow at first, then gradually showing green, pink, and violet hues. Blue-purple streamers were formed. A bright glow persisted for 30 minutes, at times bright enough to read a watch face in the dark. The fireball was seen in Hawaii also.

Kingfish was the last THOR launched device which was detonated on 1 November. The detonation occurred at an altitude of 60 miles. The dramatic visual effects were observed over much of the central Pacific. The explosion appeared as a bright yellow glow, at first circular, but elongating along a south-to-north axis. The glow persisted for at least 1.5 hours. On Johnston Island a yellow-white luminous circle with intense purple streamers was visible for the first minute. Brilliant streamers were seen going north and south from Maui. At Oahu a bright flash was seen, and after about ten seconds a great white ball was seen rising slowly out of the sea and remained visible for several minutes.

Video films of the detonations and the artificial auroras are nowadays available; e.g. Fishbowl Auroral Sequences - 7:50 - Color - Silent - »...within a second or two after the burst, a brilliant aurora appears from the bottom of the fireball. The formation of the aurora is attributed to the motion, along the lines of the earth's magnetic field, of beta particles emitted by the radioactive fission fragments. About a minute after the detonation, the aurora could be observed in the Samoan Islands, 2000 miles from the detonation. These auroras could be seen for approximately 20 minutes. The video shows footage of the auroras from Samoa, Mauna Loa (Hawaiian Islands) and Tongatapu (Tonga Islands) at various film speeds.«

The Soviets also performed similar atomic bombs explosion experiments over Siberia in October 22, 28 and 1 November 1962

ΑΙ ΑΤΟΜΙΚΑΙ ΕΚΡΗΞΕΙΣ ΕΙΣ ΤΟ ΔΙΑΣΤΗΜΑ
**ΤΟ «ΣΧΕΔΙΟΝ ΑΡΓΟΣ» ΤΩΝ ΗΠΑ
ΘΑ ΣΩΣΗ ΤΗΝ ΑΝΘΡΩΠΟΤΗΤΑ;**

- [1] Bertell, Rosalie »Background on the HAARP Project«, 1996
[2] Cullington, A. L. »A Man-made or Artificial Aurora« Nature Volume 182, p. 1365, 1958
[3] Fowler/Waddington »An Artificial Aurora« Nature Volume 182, p. 1728, 1958

Comments by Christofilos:

About his electron “death belt” could make space travel impossible: *“It is more important before exploring outer space and the possibility of traveling to, and living on other planets to secure first that we will be able to continue to live in our own planet”*.
Christofilos to York, Feb. 20, 1958, box 99, LLNL.

[A.C. Melissinos Nicholas C. Christofilos: his contributions to physics](#) PDF File (ca 900 KB)

[A new threat based on Cold War nuclear knowledge ... \(PDF File\)](#)

[Secrets of the Polar Aurora](#)

ZEVS, THE RUSSIAN 82 Hz ELF TRANSMITTER

Foster, John S, T. Kenneth Fowler and Frederick E. Mills, Nicholas C. Christofilos (obituary), Physics Today, 26, 109-115, January 1973

ΕΝΑΣ ΙΔΙΟΦΥΗΣ ΕΛΛΗΝ ΤΗΣ ΑΜΕΡΙΚΗΣ

Ν. ΧΡΙΣΤΟΦΙΛΟΣ: Ο «ΑΤΟΜΙΚΟΣ»

Ἡ θεωρία του διὰ τὸν ἰονισμόν τοῦ διαστήματος ἐπιβεβαιούται

ΤΙΘΕΤΑΙ ΕΙΣ ΕΦΑΡΜΟΓΗΝ ΤΟ ΣΧΕΔΙΟΝ ΤΟΥ

ΡΩΜΗ, Ἀπρίλιος

Ποῖος εἶναι ὁ σκοπὸς τοῦ τελευταίου πειράματος ποὺ ἀνηγγέθη ὅτι ἔγινεν εἰς τὴν Ἀμερικὴν, τὸν Αὐγούστου τοῦ 1958, ἐπὶ τῆ βάσει τῶν σχεδίων τοῦ Ἑλλήνου μηχανικοῦ Νικολάου Χριστόφλου καὶ διὰ τὸ ὁποῖον ἐχρησιμοποίησαν τόσον εὐρύτατα στρατιωτικὰ καὶ ἐπιστημονικὰ μέσα καὶ ἐξώδευσαν τόσα ἑκατομμύρια δολλαρίων; Ἐνας ἀπὸ τοὺς σκοποὺς αὐτοῦ ἀνεφέρθη: Κατ' ἀρχὴν ἡ πειραματικὴ ἐπιβεβαίωσις τῆς θεωρίας τοῦ ὡς ἂν Ἑλλήνου ἐπιστήμονος. Ἀλλὰ ἀπὸ τὰς ἀνακοινώσεως προκύπτει ὅτι ὁ σκοπὸς ἦσαν ὠρισμέναι ἀντικειμενικαὶ στρατιωτικαὶ ἐπιδιώξεις. Ἀλλὰ ὡς ἴσμεν πῶς ἔχουν τὰ πράγματα.

Ἡ ἰδέα τοῦ πειράματος αὐτοῦ δὲ φέλλεται, καθὼς ἀνεφέρθη, εἰς τὸν Ἑλληνα Νικόλαον Χριστόφλου. Εἰς τὰ 1950 ἐργάσθητο εἰς μίαν ἐπιχείρησιν ἄσσανσιρ εἰς τὰς Ἀθήνας, ἀπὸ ἐκεῖ ἀπέστειλεν ἐπιστολὴν εἰς τὰ ἄτομικὰ ἰνστιτούτα τοῦ πανεπιστημίου τῆς Καλιφορνίας, ὅπου ἐξέβλεπε τὰς ἀπόψεις καὶ τὰς θεωρίας του. Ἀλλὰ ἡ ἐπιστολὴ τοῦ δὲν ἔλαβεν ἀπάντησιν. Εἰς τὰ 1951 ἔγραψεν ἕκ νέου, ἀλλὰ καὶ ἡ δευτέρα ἐπιστολὴ εἶχε τὴν αὐτὴν τύχην. Ἀλλὰ μετὰ διετίας οἱ

πυρηνικοὶ ἀέρος. Δι' αὐτὰ καὶ τὸ πείραμα αὐτὸ παρέμεινεν ἄγνωστον ἐπὶ ἐξάμηνον καὶ πλέον.

Αἱ ἐκρήξεις αὐταὶ ἐξαπέλευσαν χεῖμας ἰονισμοῦ καὶ ἀτόμων ἐν τῷ διαστήματι, εἰς τὸ ὑπὲρ τὴν ἀτμοσφαιρὴν ἐλεύθερον διάστημα. Συμφάνως πρὸς τὴν θεωρίαν τοῦ Χριστόφλου, αὐτὴ ἡ ἀπρόβλεπτος συρροὴ ἠλεκτρονίων δὲν θὰ διεσκορπίζετο ἀτάκτως, ἀλλὰ θὰ ἠγαθωνόμεινε ἀπὸ τὸ γήϊνον μαγνητικὸν πεδίου ποὺ θὰ τὸ συνεκέντρωνε, κατὰ κάποιον τρόπον καὶ θὰ τὰ περιβαροῦσε.

Ἡ κατονομὴ αὐτοῦ τοῦ ἰονισμοῦ χειμάρρου ποὺ προσέκλῃθη εἰς τὸ διάστημα εἶχε προβλεφθῆ ἀκριδῶς ἀπὸ τὴν θεωρίαν τοῦ Χριστόφλου: διότι αὐτὴ ἀκολουθεῖ τὴν διάταξιν τοῦ γήϊνου μαγνητικοῦ πεδίου, πράγμα ποὺ ἐπιτρέπει τὴν, κατὰ κάποιον τρόπον, καλυτέραν ἀποκάλυψιν καὶ μελέτην του. Ἀναφορικῶς μὲ τοὺς χαρακτῆρας τῆς διασπορῆς ἢ τῆς κομιμότητος αὐτοῦ τοῦ ἰονισμοῦ νέφους δὲν ἀπεκαλύφθη καμμία σχετικὴ λεπτομέρεια.

Ἀλλὰ εἰς τὸ σημεῖον αὐτὸ εἰσερχόμεθα εἰς τὸ πρακτικὸν μέρος τοῦ πειράματος αὐτοῦ. Διότι ἂν εἶναι ἀληθὲς ὅτι ἕνα τόσον μεγαλιώδες πείραμα ἀσφαλῶς συμβάλλει εἰς τὴν πρόοδον τῆς ἀνθρωπίνης ἐπιστήμης, δὲν εἶναι δυνατόν νὰ παραδεχθῶμεν ὅτι ἔγινε μόνον καὶ μόνον ἐν ὄψει ἐπιστημονικῶν σκοπῶν. Καὶ πράγματι αἱ συνέπειαι τοῦ πειράματος ἔχουν καὶ μίαν ἄλλην ὄψειν.

Ἀνεφέρθη ὅτι αἱ ἐκρήξεις ἔχουν ὡς ἀποτέλεσμα τὸν ἔντονον ἰονισμόν τοῦ ἐξωατμοσφαιρικοῦ διαστήματος καὶ ἀκόμη καὶ τῶν ὑψηλοτέρων καὶ πλέον ὀρειῶν στρωμάτων τῆς ἰδίας τῆς ἀτμοσφαιρῆς. Τὰ φαινόμενα αὐτὰ προκάλυψαν διακοπὰς, ἐμπλοκάς καὶ διαταραχὰς, διαφόρου σημασίας, εἰς τὰς ραδιοφωνικὰς ἐπικοινωνίας, εἰς τὰς τηλεοπτικὰς, εἰς τὴν λειτουργίαν τῶν ραντῶν κ.λ.π.

Ἐν τούτοις φαίνεται ὅτι ὅλαι αἱ συχνότητες δὲν διαταράσσονται ὁμοιόμορφως καὶ κατόπιν τούτου ἀξίζει τὸν κόπον νὰ ἴδωμεν ποῖαι εἶναι αἱ συχνότητες κυμάτων ποὺ διαφεύγουν ἀπὸ τὴν ἐξουδετέρωσιν αὐτὴν καὶ ἐπιτρέπουν τὴν αποτελεσματικὴν λειτουργίαν τῶν ἀπυρηνικῶν ἢ ἐπιθετικῶν συστημάτων, τῶν βασισμένων ἐπὶ τῶν ραδιοηλεκτρικῶν ἢ ἠλεκτρονικῶν μέσων. Πράγματι μία περίοδος, ἀκόμη καὶ βραχεῖα, ἀχρηστεύσεως αὐτῶν τῶν μέσων θὰ ἦτο δυνατόν νὰ ἐπιτύχῃ εἰς τὸν ἔχθρον νὰ καταφέρῃ φασερά καὶ ἴσως καὶ βασιάνια πλήγματα. Ἀντιθέτως ὅμως αὐτὴ ἡ διὰ τοῦ ἰονισμοῦ διατάραξις θὰ ἦτο δυνατόν νὰ ἐμπροσθεῖ τὰς συσκευὰς ἠλεκτατευθῶσιν, πηδαιουχῆσεως καὶ αὐτομάτου ἐλέγχου τῶν ἐπιθετικῶν μέσων καὶ νὰ τὰ παρεκκλίνῃ ἀπὸ τὴν κανονικὴν τροχίαν των. Καὶ εἰς αὐτὸ ἀκριδῶς ἀπέβλεπε τὸ πείραμα, τὸ ὁποῖον μάλιστα ἐπιδιώκει καὶ τὴν πρόωρον ἐκρηξίαν τῶν ἐνδοχόμενων πυρηνικῶν γυμῶσεων τῶν διηπειρωτικῶν πυραύλων. Ἀλλὰ αὐτὸ δὲν φαίνεται ἀκόμη ὡς πιθανόν.

Καθὼς βλέπομεν τὸ φαινόμενον τὸ ὁποῖον διὰ τῆς διασπορῆσός του συνέλαβεν ὁ Ἑλληνας τεχνικός, καὶ τὸ ὁποῖον τώρα ἐλέγχεται ὁμοίως τοῦ ἐπιτυχόντος πειράματος, ἔχει εὐρυτάτους ἀντικείμενους εἰς τὸν τομέα τῆς ἐκ τοῦ μακρόθεν ἀμύνης καὶ ἐπιθέσεως (διὰ τῶν πυραύλων) καὶ φυσικὰ τῆς



Νικόλαος Χριστόφλος.

ἀρμόδιοι τοῦ ἰδίου πανεπιστημίου, ἐπὶ τῆ βάσει τῶν συντελεσθεισῶν εἰς τὸ μεταῦ ἱερωνῶν, ἀνεκάλυψαν, μὲ κατάπληξιν, ὅτι τὰ ἀποτελέσματά των διασπορῆσῶν εἶχον συλληφθῆ ὑπὸ τοῦ Ἑλλήνου μηχανικοῦ. Ἐκλήθη τότε ἀμέσως ὁ Χριστόφλος εἰς τὰς Ἠνωμένας Πολιτείας, τοῦ ἐχορηγήθησαν ὅλα τὰ μέσα καὶ σήμερον διευθύνει τὴν κατασκευὴν εἰς τὸ Λίβερμορ, εἰς τὴν Καλιφόρνιαν, ἐγκαταστάσεων ἐπὶ τῆ βάσει τῶν θεωριῶν του. Ἡ συμβολὴ τοῦ Χριστόφλου εἰς τὴν ἀμερικανικὴν τεχνικὴν δὲν περιορίζεται μόνον εἰς τὴν ἀτομικὴν φυσικὴν καὶ μία ἀπὸ τὰς ἀπόψεις του ἀφορᾷ τὰ ἀποτελέσματα τοῦ ἰονισμοῦ τοῦ ἐξωατμοσφαιρικοῦ διαστήματος. Προφανῶς ἡ ἔκθεσις τῆς τελευταίας αὐτῆς ἰδέας ἐνεφανίσθη ὡς ἐνδιαφέρουσα καὶ ἀπὸ στατιστικῆς ἀπόψεως καὶ τὸ

[A](#) - [B](#) - [C](#) - [D](#) - [E](#) - [F](#) - [G](#) - [H](#) - [I](#) - [J](#) - [K](#) - [L](#) - [M](#)
[N](#) - [O](#) - [P](#) - [Q](#) - [R](#) - [S](#) - [T](#) - [U](#) - [V](#) - [W](#) - [X](#) - [Y](#) - [Z](#)

check out the [Physics World swicki](#) at [eurekster.com](#)

Ancient Greece

[Science](#), [Technology](#), [Medicine](#), [Warfare](#),
[Biographies](#), [Life](#), [Cities/Places/Maps](#),
[Arts](#), [Literature](#), [Philosophy](#), [Olympics](#),
[Mythology](#), [History](#), [Images](#)

Medieval Greece / Byzantine Empire

[Science](#), [Technology](#), [Arts](#),
[Warfare](#), [Literature](#), [Biographies](#),
[Icons](#), [History](#)

Modern Greece

[Cities](#), [Islands](#), [Regions](#), [Fauna/Flora](#),
[Biographies](#), [History](#), [Warfare](#),
[Science/Technology](#), [Literature](#), [Music](#),
[Arts](#), [Film/Actors](#), [Sport](#), [Fashion](#)

[Contact](#) - [Advanced Search](#) - [Statistics](#) - [Support this Site](#)

—Attachments:—————

Nicholas Christofilos.htm

44.4 KB