

*The Earth is the cradle of
humanity, but you can't
live in a cradle forever!*
K.E. Tsiolkovsky

The results of the scan pyramids project and the geometry of the proposed premises of the Khufu pyramid

Annotation. Based on the methods of formal logic, analogy and modeling, the article substantiates the assumption about the purpose of the pyramids of Egypt and, in particular, the pyramids of the Giza plateau as communication devices of a highly developed ancient civilization. Based on the analogy method, the presence of significant signs of a communication device in the pyramids of Egypt is shown. The modeling method allowed us to assume: the presence of carrier waves of the pyramids – gravitational waves of the planet Earth, the structure of its gravitational field and the presence of a tunnel with a gallery closed by a granite plug in the pyramid of Khufu.

Keywords: Scan Pyramids project, proposed room, gravitational waves, Khufu pyramid, great pyramid gallery, King's Chamber.

Introduction. The epigraph to this article contains the statement of K.E. Tsiolkovsky "The Earth is the cradle of mankind, but you can't live forever in the cradle!". This statement perfectly reflects the reason for the possible "arrival" of a highly developed civilization on planet Earth from the outside. I am sure that a similar "outcome" awaits its representatives as humanity reaches the necessary level of technology for moving in interstellar space.

The question of the purpose of the Khufu pyramid must be considered in close connection with the assumption of the existence of an ancient highly developed civilization and given the extremely high volume of work during its construction. Therefore, the importance of the pyramid construction task should strictly correlate with the significance of its functional purpose.

Today, various assumptions about the purpose of the pyramids are being considered within the framework of the hypothesis of the existence of an ancient highly developed civilization (a civilization that "came" to the planet regardless of its indigenous origin – planet Earth or another planet of another star system). The probable number of representatives of an ancient highly developed civilization is from 1 to 5 thousand. In these conditions, it is not possible to create a sustainable high-tech community, as well as technological production. For example, the production of processors requires the functioning of many industries. In addition, it will take considerable time to physically adapt to the conditions of the new planet and expand the population to critically significant indicators.

Considering the above (about the importance of the task of building pyramids), the most promising is the assumption of the functional purpose of pyramids as communication devices between the centers of human civilization development (the signal of the pyramids should penetrate the thickness of the planet's substance without loss) and between different star systems at a speed significantly exceeding the speed of light – the speed of propagation of gravitational influences. In particular, it is assumed that there is a connection between the Giza pyramid complex and a similar device of the "Meterin" planet in the area of which a tunnel is directed with reference to the stars in the directions of the air ducts.

Representatives of the ancient civilization that "came" to Earth probably used the knowledge and tools of their civilization in order to build pyramid devices. Over time, tools were destroyed under the influence of natural physical factors, and scientific knowledge and technology were forgotten, hidden or spread to mankind in the form of mythologized religious and philosophical treatises (for example, in the form of Plato's treatise "Timaeus").

Developing the named assumption about the purpose of pyramids as communication devices, it is proposed to use three scientific methods: formal logic, analogy and modeling. It is known that when exploring a certain object, we cannot know it in its entirety, but study it gradually, revealing more and more of its properties. Having studied some of the properties of an object, we can already find that they coincide with the properties of another, already well-studied object. Having established such a similarity and having found many matching features, it can be assumed in this way that other properties of these objects also coincide. The method of analogy, understood very broadly as the transfer of information about some objects to others, forms the epistemological basis of modeling. Modeling is a method of scientific cognition by which the study of an object is carried out by creating its real or non-real copy, replacing the original, which is then known from certain sides of interest to the researcher. There must be a certain similarity between the model and the original.

The main part. In 2015–2016, a group of researchers of the Scan Pyramids project worked in the pyramid of Khufu. The result of their work was the finding of cavities above (near) the pyramid gallery (Figure 1).

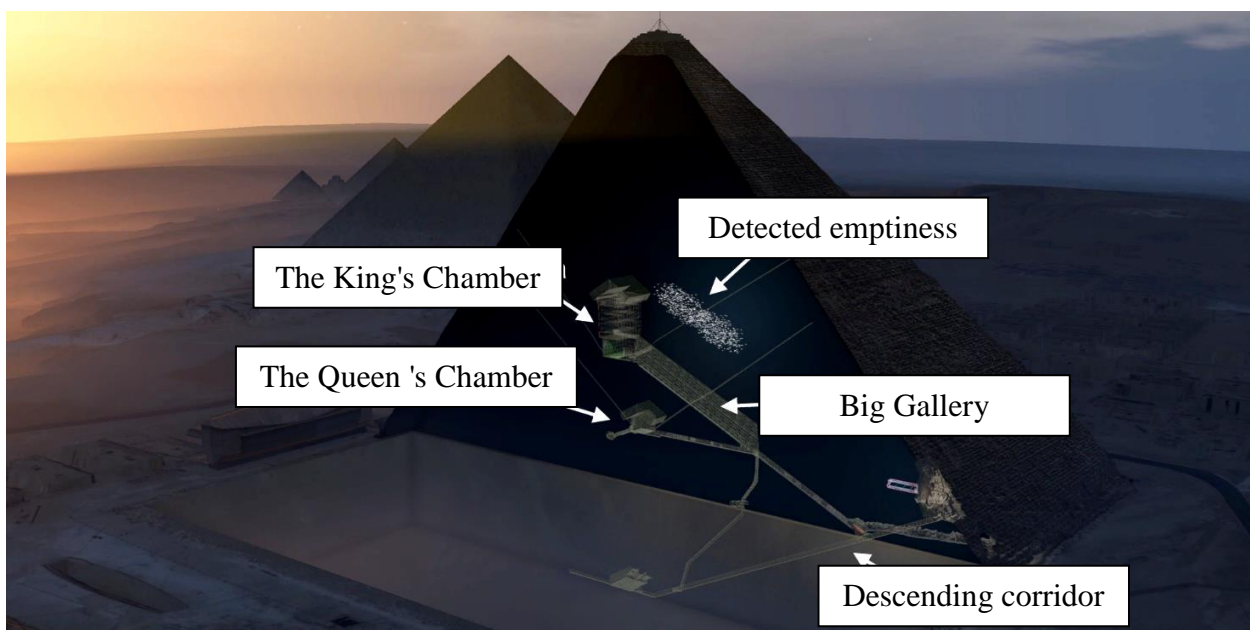


Figure 1 – Three-dimensional image of the pyramid of Khufu with the intended location according to the results of a study by a group of scientists of the Scan Pyramids project

Based on the analysis of the structure of the pyramid premises and taking into account the location of the proposed cavity (based on the results of research by a group of scientists of the Scan Pyramids project), a theoretical model of the location of the new room and its possible connection to the King's chamber was created (Figure 2, 3). At the same time, a two-dimensional model of the location of the proposed gallery with a display is clearly shown in 2 projections waves of unknown nature, as well as an alleged tunnel with an alleged place of its origin (Figure 2). The choice of the place of the beginning of the proposed tunnel to the second gallery is due to an analogy – the location of the beginning of the tunnels in the red pyramid and the pyramid of Khufu – at the junction of the wall surfaces (Figure 4, 5). In connection with the model under consideration, which is clearly presented in Figure 2, it is assumed that relatively high temperature zones may occur at the intersection of waves of unknown nature (as a result of polarization of waves of unknown nature). In this regard, it can be assumed that a temperature insulator is necessary to maintain the temperature regime of the pyramid. It is known that heavy monatomic (inert) gases have the lowest thermal conductivity. Thus, gases from the group of inert gases are the most suitable for filling the cavities of the discharge chambers in accordance with the assumption under consideration.

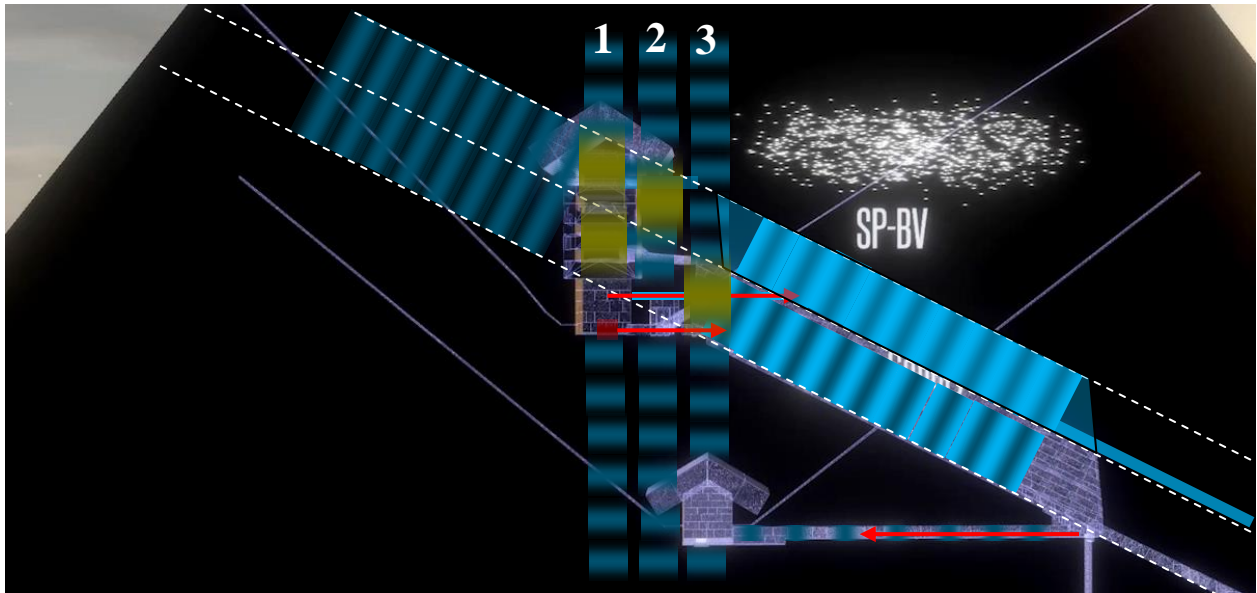


Figure 2 is a schematic representation of the chambers of the Khufu pyramid with the proposed room (according to the results of a study by a group of scientists of the Scan Pyramids project) and a model of the location of the proposed gallery with the display of plane waves of unknown nature: 1 - waves of the King's chamber, 2 - waves of the underground chamber, 3 - waves of the Queen's chamber. The yellow color indicates possible zones of relatively high temperature

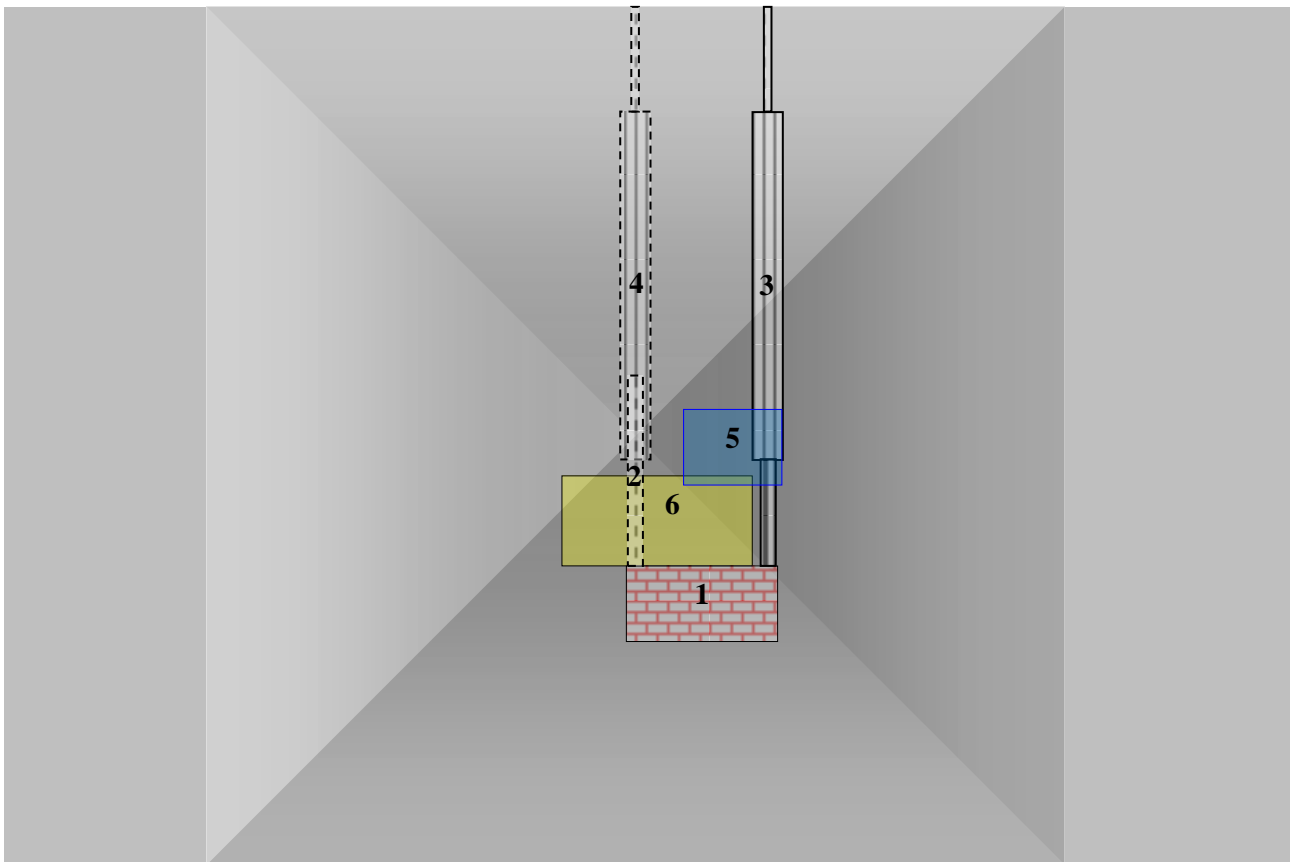


Figure 3 – The pyramid of Khufu, its premises and the model of the location of the new room, its possible connection with the King's chamber (top view) 1 - the King's chamber, 2 - the alleged tunnel (length ≈ 5 m width $\approx 1.05 \times 1.05$ m), 3 - the gallery with the ancamera, 4 - the alleged gallery, 5 - the Queen's chamber, 6 - underground chamber



Figure 4 – The King's chamber and the possible presence of a granite plug indicating the place of the beginning of the tunnel to the second gallery of the pyramid of Khufu

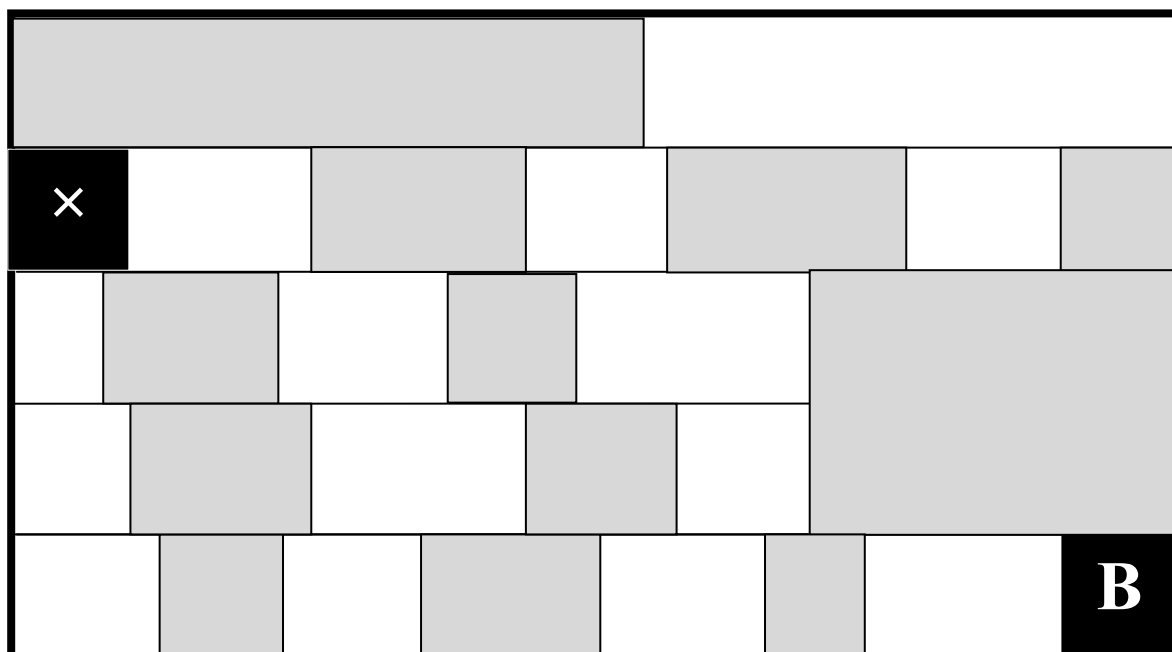


Figure 5 – Blocks of the north wall of the King's chamber with the proposed location of the tunnel.
 B - entrance, X - the place of the beginning of the proposed tunnel closed with a granite plug

The assumption about the nature of the waves of communication devices (pyramids).
 The view of the Earth as a kind of crystal has been known since ancient times. The ancient Hindus said that our planet is divided into regular triangles: this is stated, for example, in their epic "Mahabharata". There is evidence that at one time Pythagoras and Plato identified the Earth with the dodecahedron (duodecahedron). Plato mentioned this in his work "Phaedo" as follows: "The earth... looks like a ball sewn from twelve pieces of leather." In this regard, it is assumed that Plato's

allegory is not accidental, and under the dodecahedron in the form of a dodecahedron, the philosopher narrated about the structure of waves of unknown nature. Given the number of coincidences in the location of the pyramids on the Giza plateau with the projection of the dodecahedron on planet Earth (located on the line in the middle of the dodecahedron edge), it is assumed that the "functioning" of the pyramids on the Giza plateau is directly related to waves of unknown nature, which have the form of a wave field of the dodecahedron shape (Figure 6, 7). It is also assumed that The nature of the waves of the dodecahedron field is gravitational.

Figures 6 clearly show the probable use of the proposed plane gravitational waves of the planet Earth as carriers for the transmitting communication device – the Giza pyramid complex, and Figures 8 and 9 show the directivity of the gravitational waves of the directional antenna of the pyramid and the model of the in-phase wave process when using the carrier plane gravitational waves of the planet Earth.

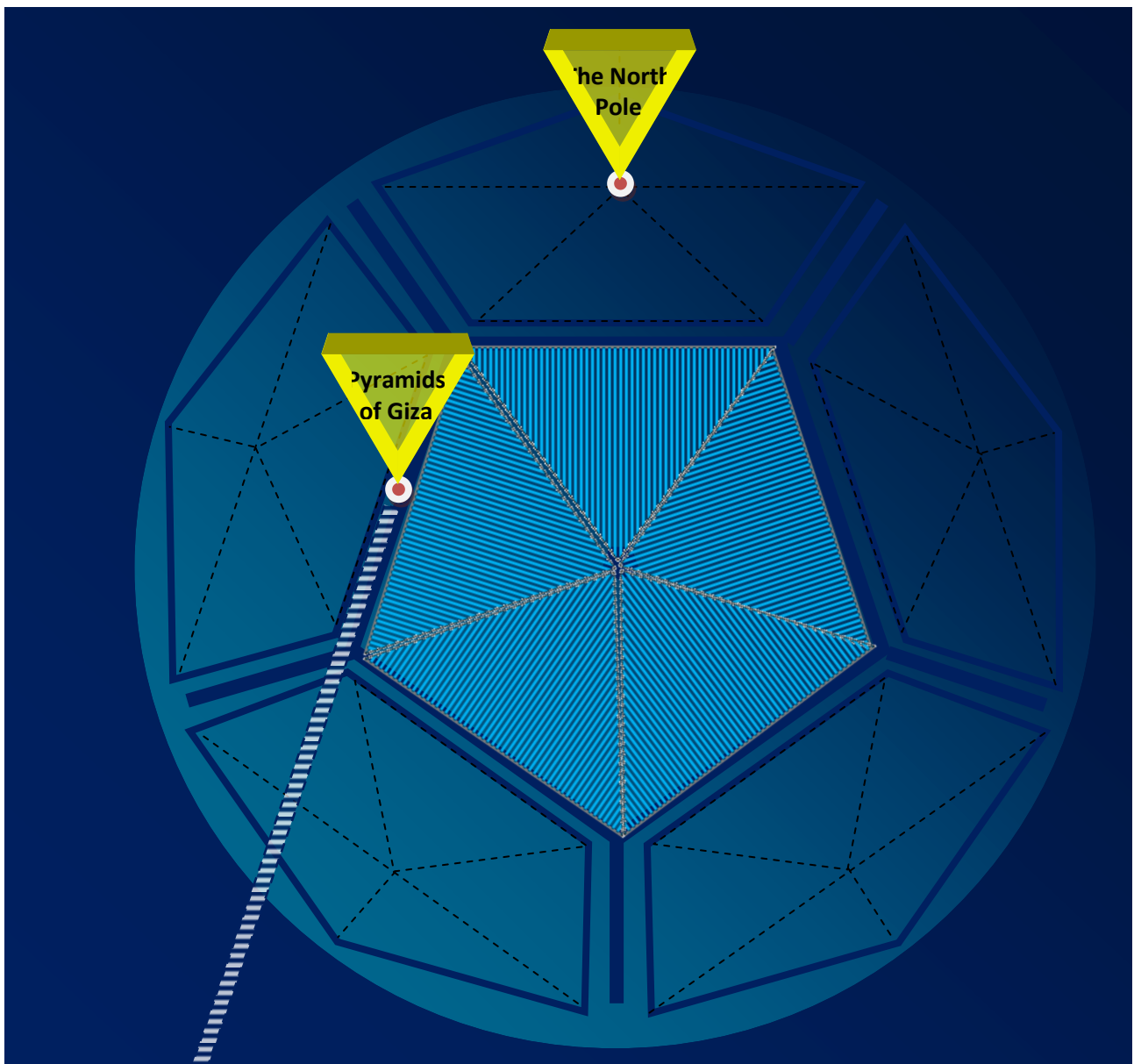


Figure 6 – Structure and directivity of plane gravitational waves of one of the 12 pentagons of the proposed dodecahedral structure of the Earth's gravitational field and the use of plane gravitational waves as carriers for a communication device (the Giza pyramid complex) in the form of a directional antenna

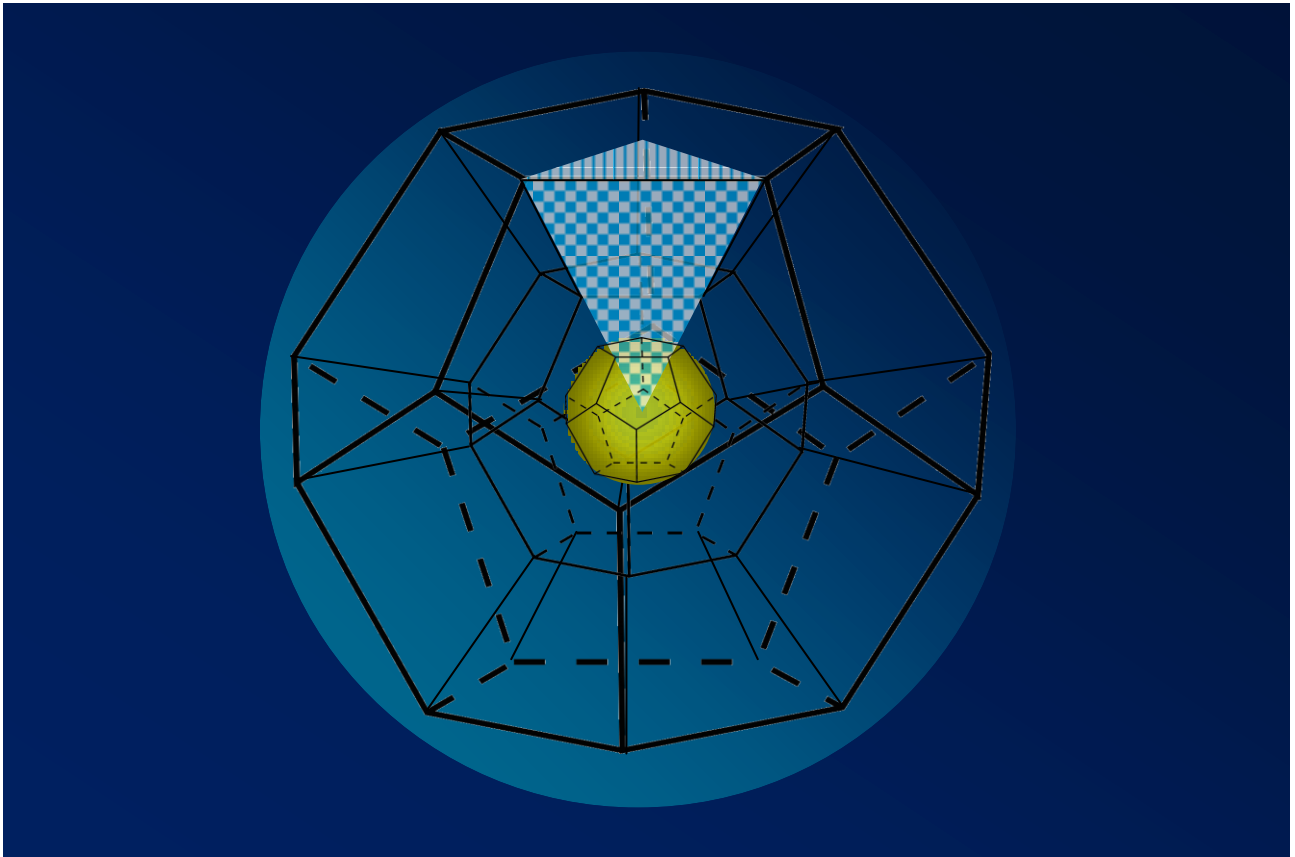


Figure 7 – The structure of gravitational waves inside the three-dimensional model "Earth". The possible "structure" of the earth's gravitational field with one (out of 60) structural unit and the iron core of the planet (the source of gravitational waves) is displayed

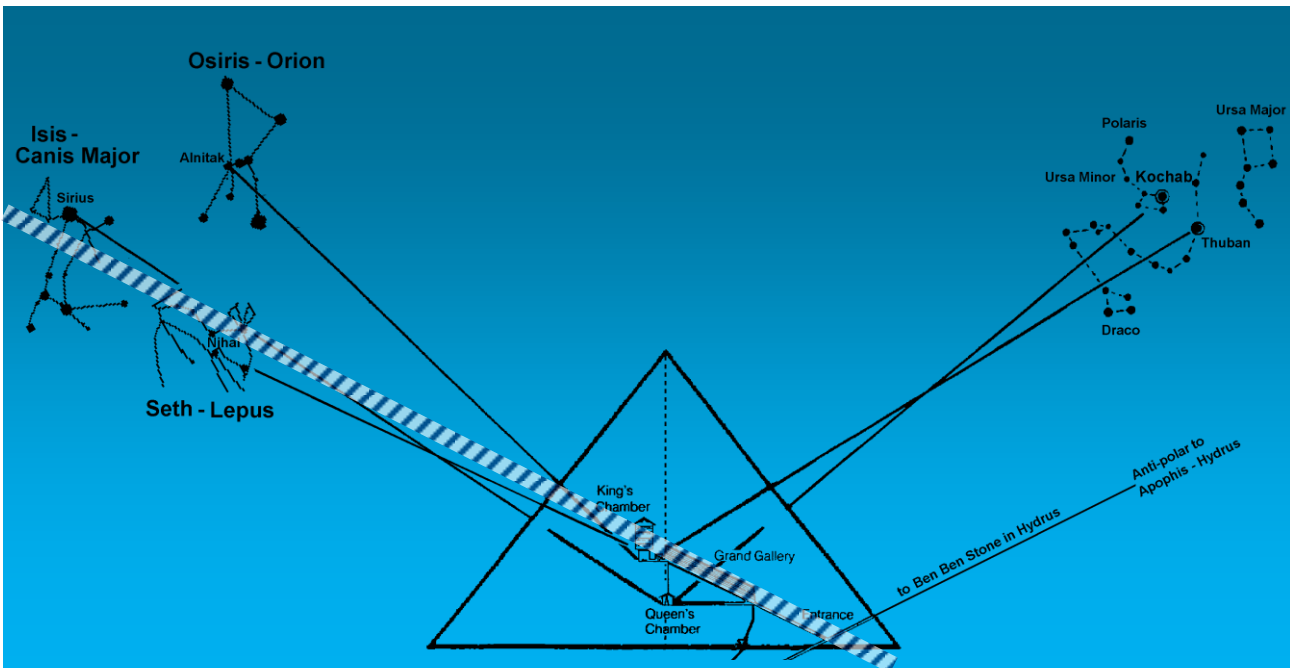


Figure 8 – Directivity of gravitational waves of the directional antenna of the pyramid to the constellation of the hare – the stars Nihal (β), Eta Hare (η) and Zeta Hare (ζ)

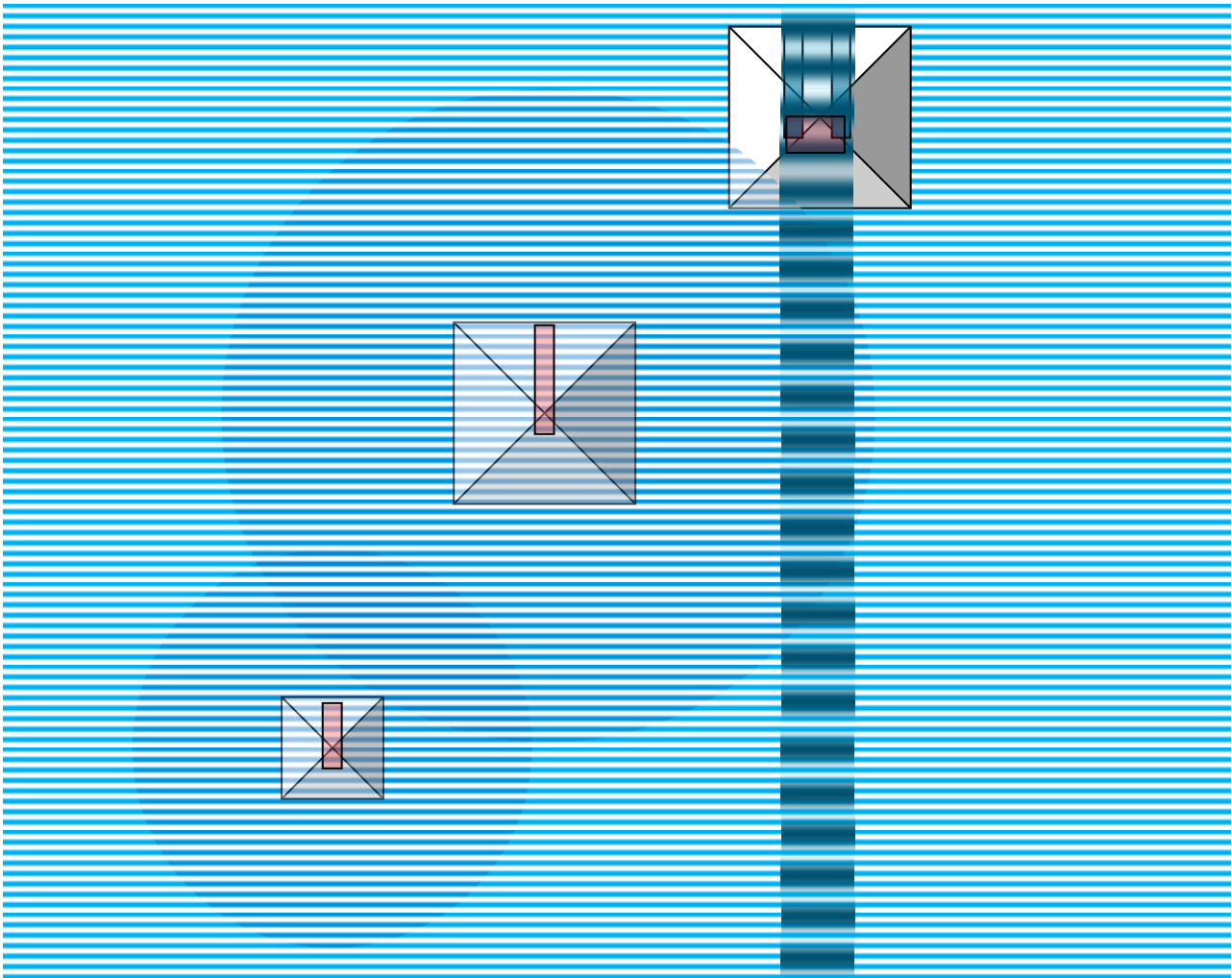


Figure 9 – Giza Pyramid Complex (top view) as a communication device: a model of a common-mode wave process using carrier plane gravitational waves of the planet Earth

The presence of a relatively large number of pyramids on the banks of the Nile River can be interpreted, in connection with the version about the means of communication, as a technogenic agglomeration directly related to the function of the Khufu pyramid – long-range space communication. In this case, a set of relatively closely spaced pyramids can create a single carrier wave of communication.

The presence of: one oscillator (sarcophagus), two waveguides (pyramid galleries), a medium that tolerates disturbances (presumably ice under pressure of several thousand atmospheres filling the cavities of the pyramid – the gallery, the Tsar's chamber) makes it possible to imagine a directional antenna in which processes can be distinguished:

- polarization of signal waves and gravity waves (due to the angle formed between the horizontal of the earth's surface and two galleries);
- interference between two waveguides (due to coherent perturbations of the waves of two waveguides).

The facts led to the version about the freezing of matter in the cavities of the pyramids: the composition of the materials from which the pyramids are built and their physical and chemical properties. The internal structural elements of the Khufu pyramid are made of granite. Granite has low water absorption and high resistance to low temperatures. The pyramid's body is made of limestone. It is known that among the physical properties of limestone, high thermal insulation properties are mainly distinguished. The technology of freezing a large amount of matter in the

cavities of the pyramid is not known. The method of such freezing of liquid in a relatively large volume is not known today.

It can be assumed that in the "working" state, the Tsar's chamber was hermetically sealed with a plug (two plugs in accordance with Figure 5) and the pressure during wave vibrations of the solid medium of the cavities could probably move this granite plug (Figure 10). The functional purpose of granite plugs in connection with the considered version is presumably as a means of transmission the mechanical energy filling the cavities of the pyramid chambers of a substance in the aggregate state of ice.

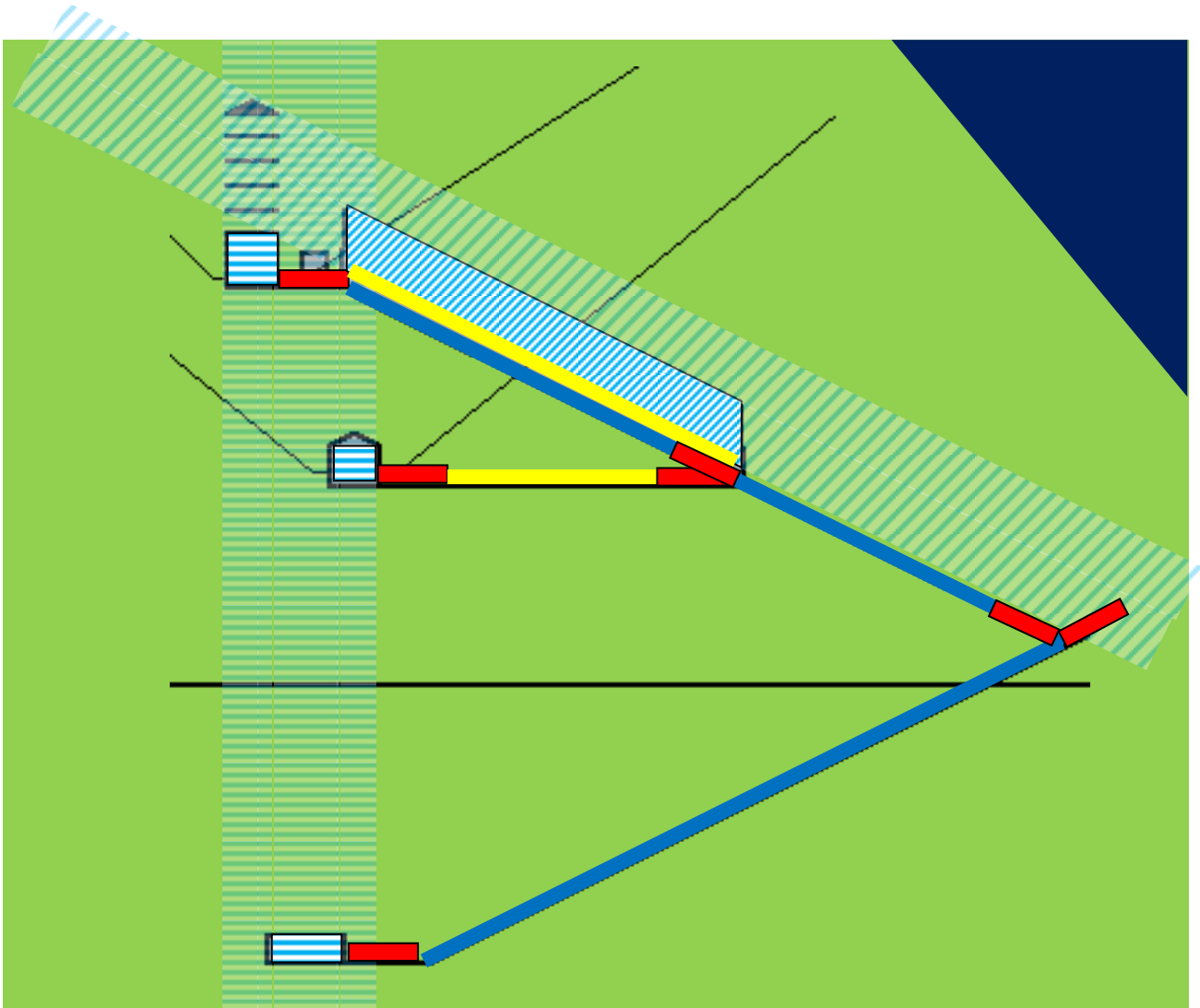


Figure 10 is a schematic representation of the chambers of the Khufu pyramid, where: tunnels (waveguides) are shown in yellow and blue, granite plugs are shown in red, rooms (resonators) and disturbance of the wave medium are shown in blue

The presence of projections in the gallery and recesses with ledges in the wall of the Queen's chamber can be interpreted as a kind of technical technique – using them as guides for the orientation of mechanical transverse waves in the filling substance (in the ice thickness) of resonator rooms. According to this assumption, the direction of the waves will be oriented in relation to the greatest lengths of the rooms, the direction of the ledges of the gallery and the recess of the Queen's chamber.

The existing recesses on both sides of the gallery ramp can technologically perform the function of a kind of wave filter – when mechanical vibrations of transverse waves of an elastic medium (ice) are limited by these recesses (or objects inserted into them). In addition, the presence

of a recess in the ramp (or objects inserted into them) allows you to "remove" part of the mass of the substance filling the inclined gallery (in the form of ice), the mass of which should exert significant pressure on the end surface of the lower part of the gallery.

Analogy of the model of the radio communication device with the communication device "Pyramid". In both cases, the following essential features of communication technology can be distinguished:

- the use of an oscillatory circuit in radio communication devices and possible mechanical vibrations of waves in the substance filling the pyramid cavity (in the resonators of the Khufu pyramid – rooms – the King's chamber, the Queen's chamber, an underground chamber, a gallery);

- the presence of electrical vibrations in the antenna and possible vibrations of the substance filling the resonator gallery with the transformation of mechanical waves of matter into waves of unknown nature;

- the directivity of the antenna for directional electromagnetic communication devices and the directivity of the gallery (two galleries) of the Khufu pyramid;

- the use of the polarization effect of electromagnetic waves in a number of directional antennas and the possible use of polarization of waves of unknown nature in the Khufu pyramid (the intersection of coherent waves of unknown nature in the vertical direction with the inclined direction of the gallery for their complete polarization (Figure 10));

- the use of electric current for the operation of a radio communication device and its possible use in the pyramid of Khufu (the presence of channels in the thickness of the pyramid as a possible location of electric current conductors necessary for a piezoelectric current converter (located in the sarcophagus), the operation of which leads to the formation of mechanical vibrations of the substance filling the cavities of the pyramid);

- the presence of transmitting and receiving communication devices for radio communication and the possible functional purpose of individual pyramids (buildings) both transmitting (pyramids with sarcophagi) and receiving devices (the complex of sarcophagi of the Serapeum in Saqqara or the presence of a free-standing closed sarcophagus, insulated and lined with solid (hygroscopic) materials of the room (Barabar caves)). In addition, it is likely that the functions of receiving and transmitting a signal are combined – the existence of constructive solutions that allow using both the function of transmitting and receiving a signal (the Sekhemkhet pyramid).

Conclusion. According to the results of theoretical research (theoretical model), there is confidence that direct proof of the technological purpose of the Khufu pyramid (and, accordingly, all existing pyramids) can be obtained only as a result of an ascertaining scientific experiment in a physical laboratory. And in this regard, the very structure or arrangement of the pyramid can only be of secondary importance. It must be admitted that the builders of the pyramids did not leave anything tangible in the pyramids that could allow, at the present stage of the development of science, to establish a certain physical phenomenon or process underlying the proposed communication technology. Mainly, the physical component is important here – a phenomenon, a process – on the basis of which the technology of wave formation of an unknown nature is possible. The scientific discovery of technology, on the basis of which it will be possible to form waves of an unknown nature, will probably lead to key, revolutionary consequences for humanity (for example, recording signals of extraterrestrial intelligent life, a change in the technological order, a shift in the scientific paradigm, and others) for which it may not yet be ready.