



## Modern Vortex Microwave Levitation of Spacecraft

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### Abstract

Modern vortex levitation of spacecraft is possible by the action of microwave propulsion. Microwave vortex thrust ensures the equilibrium rest of the spacecraft in the gravitational field. Equilibrium rest allows you to develop a speed of movement above the speed of light, which ensures movement from one star system to another. Orientation of the movement of spacecraft can be set according to the parameters and characteristics of the planets of the stellar systems of the Universe. The movement of spacecraft is carried out along the energy contour of the connection of the planets. Spaceships will make it possible to explore the Universe on the basis of vortex natural levitation technologies. Spacecraft must take into account the physical conditions of the habitation of stellar systems and planets.

**Keywords:** Vortex Levitation; Spacecraft; Microwave Thrust; Equilibrium Rest

### Introduction

Modern rocket engines cope well with the task of launching equipment into orbit, but are completely unsuitable for long-term space travel. Scientists are working on creating alternative space engines that could accelerate ships to record speeds.

There is a constant energy exchange in the Universe. From one energy, other types of energy are formed. Energies create the movement of objects in space. The movement and movement of space objects is carried out by natural technologies along energy circuits.

The modern asura civilization accumulates and uses energy for space levitation in the Universe based on natural technologies. Spaceships use the energy exchange to resonate with the planets at their own frequencies, for their navigation in the star systems of the Universe. According to the resonant characteristics, the energy contour of the spacecraft movement in the corresponding direction with a superluminal speed of movement is formed.

In Russia, Korovin created a spacecraft flying without fuel, the flight of which he demonstrated in 1917 in the presence of Konstantin Eduardovich Tsiolkovsky. The spacecraft was constructed from rare metals and space iron. Korovin believed that the spacecraft is set in motion by vortex ethereal energy.

Chinese, American, European microwaves based on EmDrive technology carry out levitation due to the pressure of magnetron microwaves on the walls of a cone-shaped chamber that creates thrust. Microwaves require electricity to operate. Microwaves carry out levitation due to microwave thrust, which provides them with an equilibrium rest.

Russian researchers and scientists are developing new space, fuelless technologies [1-4].

### Modern space microwaves

Modern microwave motors contain a cone-shaped chamber, a magnetron for emitting microwaves, and an asymmetric resonator for pumping microwaves (Figure 1).

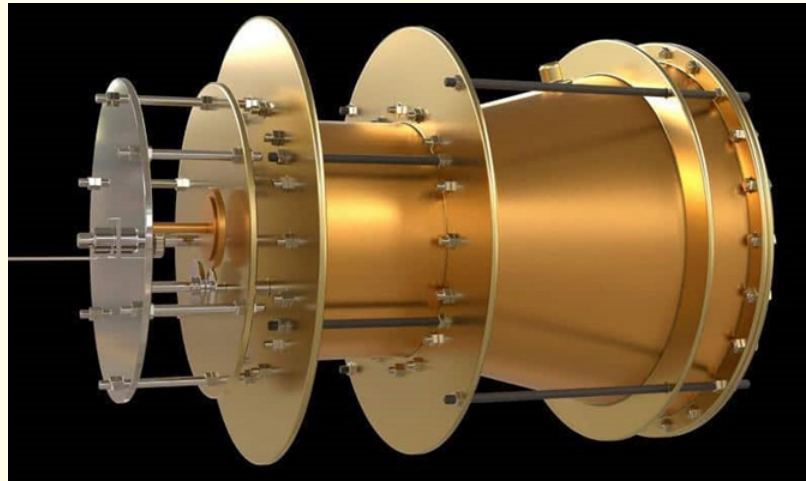


Figure 1: Microwave engine.

The asymmetric resonator, as a microwave absorber, includes a monolayer of graphene and a transparent ultra-thin layer of doped silver as a reflector, as well as fused silica of the middle dielectric layer. The asymmetric resonator ideally absorbs microwaves with an ultra-thin graphene film. The absorption frequency of the resonator is tuned by the thickness of the dielectric spacer.

The standing wave of the asymmetric resonator creates thrust (Figure 2). Pumping microwave energy into an asymmetric resonator increases thrust. The power of microwave thrust can be increased by reducing energy losses. A microwave thrust of one newton is sufficient to propel the microwave.

The magnetron and the asymmetric resonator ensure the equilibrium rest of the microwave, that is, free flight in the gravitational field. The pumping of thrust energy by electromagnetic microwave radiation resonantly regulates the speed of the microwave aircraft by a vortex flow. The vortex microwave electromagnetic process of the magnetron is created by vortex energy exchange. By changing the force of the vortex microwave thrust by the resonator, one can smoothly control the speed of the microwave in free flight [5,6]. As well as during takeoff and landing.

**International practice of using EmDrive technology**

The results of NASA studies published in 2016 showed that EmDrive generates positive thrust at different power levels (40, 60 and 80 W), as well as in hard vacuum and ordinary air at atmospheric pressure [7,8].

Researchers at the Northwest Polytechnic Institute in Xi’an, China, and employees of the American company Cannae also reported positive results. German scientists from the Dresden University of Technology also published results that predictably confirmed the presence of microwave thrust [9]. China has successfully tested a microwave propulsion vehicle aboard the Tiangong-2 space laboratory.

China’s space program, once it uses new technologies such as the LM-5 heavy rocket and satellite electric propulsion, will aim for interplanetary missions in 2024, including possible probes sent to

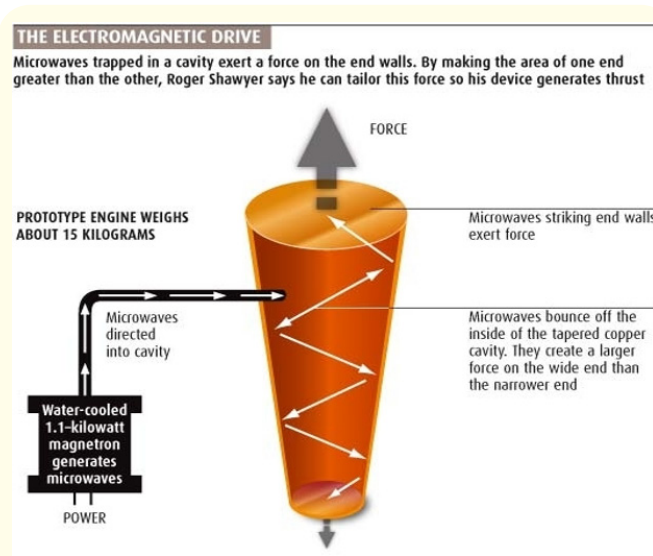


Figure 2: Microwave thrust.



**Figure 3:** Microwave propulsion test in space.

Mars, Venus, asteroids, observation near the Sun and Jupiter. China's deep spacecraft will be guided by X-ray pulses from distant stars. X-ray navigation will give deep space systems such as robotic probes and interplanetary manned missions faster and more accurate navigation. Because it doesn't require expensive terrestrial radio arrays, it's also cheaper on the wallet. The advantages of X-ray navigation include greater accuracy and reliability; the spacecraft would not need to rely on radio signals, which take longer to travel into deep space and lose signal fidelity. X-ray navigation is also cheaper because spacecraft no longer need large, expensive ground-based radio antennas for navigation signals. In addition, the spacecraft will be autonomous, which will save bandwidth for transmitting scientific data to Earth. China is demonstrating a plan to become a leading space power.

Cannae, which is developing one of the implementations of the "impossible" EMDrive engine technology, has licensed the use of this technology to its subsidiary Theseus Space Inc. Theseus will create the CubeSat minisatellite, which will be the first space demonstration of the EMDrive technology, which will be able to provide spacecraft flights beyond the solar system in the future. The engine that will be installed on the experimental satellite is somewhat different from the engine tested in early 2016. It will not require cryogenic cooling, and the thrust force will be generated by it through the use of Lorentz forces.

The success of the first real tests of the EMDrive engine will determine the further development of this direction. If successful,

Theseus plans to commercialize the non-jet propulsion technology for CubeSat satellites, and later scale the technology to several Newtons of thrust, more suitable for applications in outer space. According to preliminary calculations, a spacecraft with such an engine, carrying up to 2000 kilograms of payload, can cover a distance of 0.1 light years in a 15-year period of time.

Future EMDrives made from superconducting materials will have high performance. Potentially, a ship equipped with an EMDrive engine can reach the Moon in just a few hours, and Mars in 2-3 months [10].

### Conclusion

EMDrives are ideal for deep space exploration, since they remove the need for refueling—or even the weight and space needed to store fuel—thus simplifying logistics and design. In theory, all one would need for an EMDrive would be a power source, like solar energy or a reactor, to fuel anything ranging from a manned Martian mission to robotic probes going outside of the solar system. EMDrives would also result in smaller and more efficient satellites, since they could ditch space-consuming chemical thrusters used for maneuvering.

It is necessary to start research on the movement of microwaves along the energy circuit of the connection of the planets within the solar system. In the power circuit, microwave thrust can be enhanced many times over by natuvortex resonance technology. The development of vortex natural technologies of levitation will allow spacecraft to move in the universe on the basis of microwave propulsion.

Lightweight cone-shaped cars and trains will also be able to move from microwave resonant vortex thrust in equilibrium rest.

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