



Detailed Information About OBRok Token

OBRok Token White Paper

Rocket, UAV (Unmanned Aerial Vehicle) and Renewable Energy offers solutions for technologies.

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OBRok

- OBRok, with its rockets designed for cube satellites and electronic devices that want to settle in space orbit, enables it to reach the target quickly and at low cost.

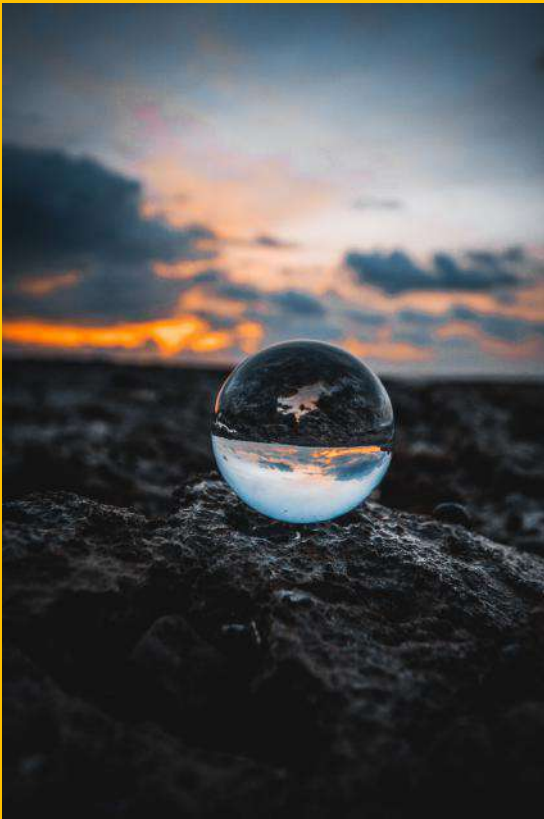
- OBRok, at the same time, by seeing the need for energy in the world converts waste into energy using biomass technology.

- OBRok also produces innovative solutions with our UAV (Unmanned Aerial Vehicle) studies.

We are a team that has been working on Rocket UAV (Unmanned Aerial Vehicle) and Renewable Energy for a long time and sees some deficiencies in this sector and wants to make our project more usable by integrating BLOCKCHAIN technology.



OBROK
T O K E N



Our Goal

We will be proud to start our commercial flights with the rockets we produce, to use our own cryptocurrency OBROK Token as a payment method, and to be the first rocket company to be used within Blockchain technology.

This Group, which was established to raise awareness in the world about aviation, space and technology, aims to ensure that the cube satellites to be sent to space reach their targets with minimum cost and maximum benefit.

Target Customer Group: Universities, technopark companies, projects aiming to follow natural events, commercial projects, space research projects, and curious entrepreneurs :)

- Sending less than 5 kg cubed satellites and electronic devices into space in the short term.
 - In the medium term, sending 5 kg to 25 kg cubed satellites and electronic devices into space.
 - To aspire to all commercial space travels over 25 kg in the long term.
 - To support universities and R&D centers
 - To Create the payment system with own payment tool OBROK Token.
 - Using the OBROK Token as a financial resource in the space exploration development process.
 - To make the OBROK Token an investment tool for those who will buy this token.
 - To support social responsibility projects with the OBROK foundation to be established.



Why OBRok ROKET?

- ▶ Humanity's curiosity about the sky has led humanity to discover since ancient times, paved the way for the construction of new machines and inspired humanity to go to the depths of space. That determination to explore within us never dies. A new knowledge learned in each new space mission brings with it the discovery of technologies that have incredible benefits for humanity. We say that we are in this discovery with our well-equipped and trained staff.
- ▶ In today's conditions, we have seen that it is both costly and very difficult to transport the satellite and electronic devices developed by our universities, research institutions and curious entrepreneurs to various layers of space. We also realized that scientific research could not be done due to some international disagreements.
- ▶ We observed that the cube satellites to be sent for research could not be sent on the desired date and number due to very high costs.
- ▶ Knowing that it will be very difficult and costly to put cube satellites into orbit prevents developers and manufacturers from producing projects on this subject. Due to these costs and challenging processes, universities and technology institutions cannot carry out their research tasks and concentrate on different branches.



Perspective on the Problem and Approach to OBRok

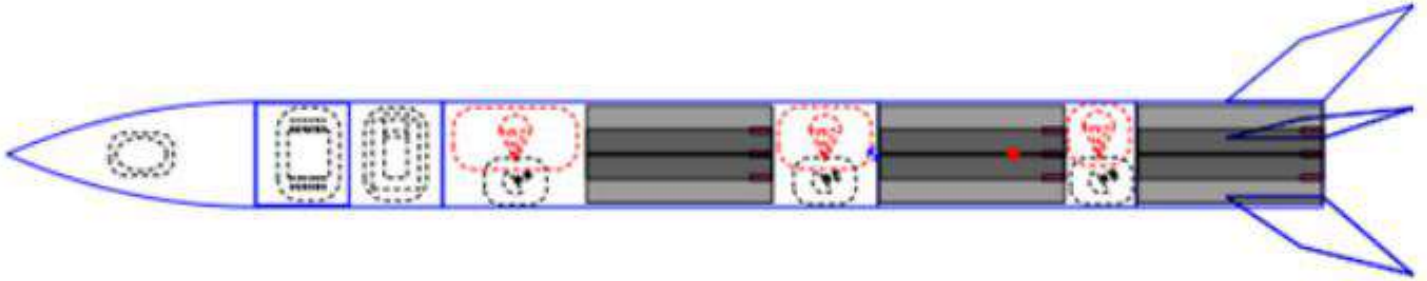
The costs of the production and test stages of large rockets are very high. In addition, the slightest mistake causes great financial and time loss in trials. For these reasons, in order to reduce costs, our rockets aim to deliver 5 kg cargo packages with solid fuel technology to the desired altitude by making low, medium and high altitude flights at the first stage. It aims to make transport, ignition, steering, take-off, soaring and fuel proportions economically and safely.



ARGET OBROK ROCKET

Our targeted Rocket model and its technical specifications are listed below.

Rocket Design



Rocket

Stages: 3

Mass (with motors): 351798 g

Stability: 1,32 cal

CG: 279 cm

CP: 323 cm

3xO8000-P; 3xO8000-P; 3xO8000-P

	Motor	Avg Thrust	Burn Time	Max Thrust	Total Impulse	Thrust to Wt	Propellant Wt	Size
Altitude	100765 m							
Flight Time	O8000 (x3)	7980 N	5,15 s	9389 N	41125 Ns	5,53:1	18610 g	161/597 mm
Time to Apogee	153 s							
Optimum Delay	O8000 (x3)	7980 N	5,15 s	9389 N	41125 Ns	3,25:1	18610 g	161/597 mm
Velocity off Pad	27,4 m/s							
Max Velocity	O8000 (x3)	7980 N	5,15 s	9389 N	41125 Ns	2,31:1	18610 g	161/597 mm
Velocity at Deployment	Total:				370128 Ns	6,94:1	167490 g	
Landing Velocity	7,75 m/s							

- Length: 452cm
- Diameter: 34cm
- Mass: 352,428 kg
- Fins: 5 Pieces
- Material: CarbonFiber
- Altitude: 110 km
- Maximum speed: 1539 m/s
- Maximum acce.: 176 m/s²
- Fuel Type: Solid Fuel
- Number of Levels: 3 levels
- Avionics System: Available
- Response Control System: Available
- Recovery System: Available
- Payload Capacity: 25 kg

General Systems of the Rocket

You needed this, and we made it!

The Obrok rocket is a vehicle consisting of 3 parts and designed to leave a useful load at 110 km altitude. After takeoff, the 5-winged Obrok rocket analyzes all the situations in the air and transfers them to the ground station via the avionics system on it. The avionics system is an electronic system and it is the brain of the rocket. Circuit elements such as sensors, transmitters, status control elements and GPS on the avionics system detect all movements and actions of the rocket. In addition, this avionic system controls the reaction control system to which it is connected, allowing the rocket to navigate in a smooth route in the air and to steer the rocket. The reaction control system is a system that works based on the action-reaction law as a basic principle. This system gives direction or balance to the rocket by spraying regular gases from the pores on the rocket. Thus, the Obrok rocket autonomously navigates in a smooth course in the air and carries its payload to low earth orbit with sure steps. The rocket will be produced from carbon fiber material to withstand the loads that will be placed on the rocket while cruising in the air. Thus, it will be able to withstand both heat and pressure. It can carry a useful load of up to 25 kg on the nose cone. These payloads are envisioned as satellites. While the rocket continues its mission and continues its flight, on the other hand, the parts leave the rocket and descend to the earth with their parachutes. The falling speed of the step boosters to the ground was calculated as 7-75 meters/second. The Obrok rocket has Ogive nose cone, cylindrical body tubes and tapered swept shapes as geometry. These geometry shapes have been determined as the most suitable options considering the speed at which the rocket is flying and the loads it is exposed to.



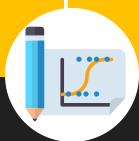
Slight Stages



PREPARATION



FIRST FIRE & LAUNCH



STEP 2 IGNITION



STEP 3 IGNITION



SUCCESS !

Plan:

PREPARATION

First of all, the rocket is completely produced and after the assembly is completed successfully, it is placed on the ramp. After the necessary checks are made on the ramp, it is checked whether the rocket is sending data to the ground station. If the rocket successfully transmits data to the ground station, it is ready for flight.

FIRST FIRE & LAUNCH

The countdown is done, and the rocket is fired. After the rocket is fired, it will start to rise with the burning of its first part thanks to the support of the ramp. Meanwhile, the avionics system checks the entire status of the rocket and sends data such as height, speed, angle, acceleration to the ground station. In addition, it controls the reaction control system to keep the direction of the rocket as desired. This process continues until the rocket reaches 20,000 meters. When the rocket reaches 20,000 meters, the first part leaves the rocket and descends with its own parachute, and the second stage of the rocket is fired.

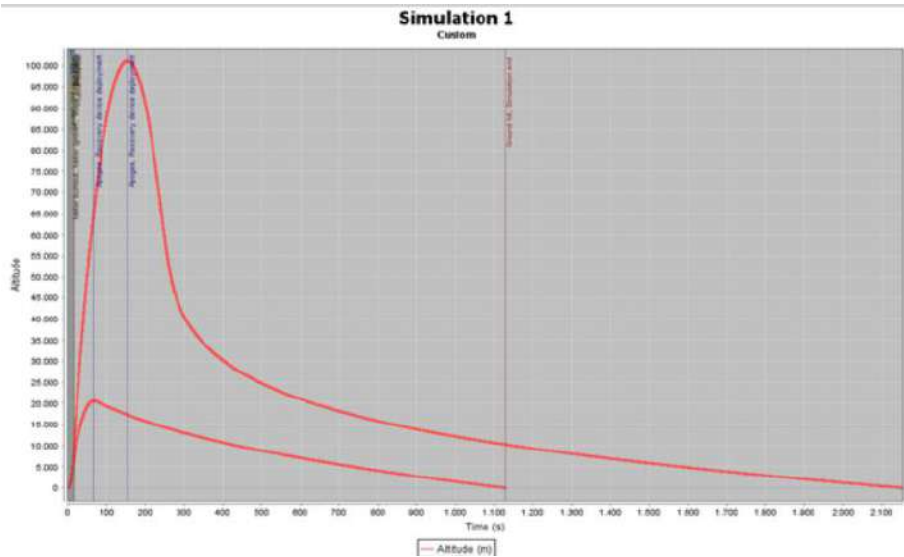
STEP 2 IGNITION

After the second part is fired, the rocket no longer has wings. But due to the change in the center of gravity, the stability value has become more uniform. On the other hand, the avionics system works to fly the rocket in a stable manner by using the reaction control system. Thus, the rocket rises to an altitude of 60,000 meters with the second stage. At this stage, the second part is separated and the third stage of the rocket is fired.

STEP 3 IGNITION

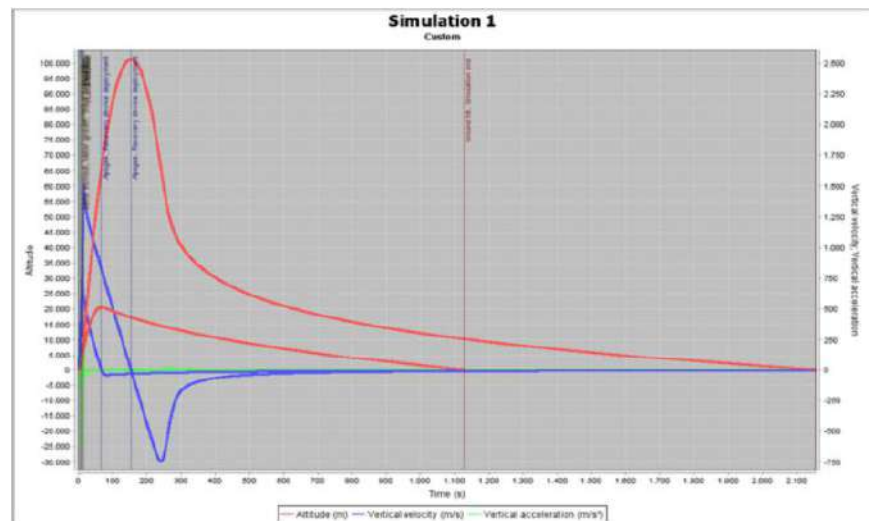
After the third part is fired, the avionics system continues to send data to the ground station and stabilizes the flight of the rocket with the reaction control system. With this stage, the thrust of the rocket, which exceeds 100,000 meters, is now exhausted, and after leaving the third part to fall to the earth, it controls the rocket with the reaction control system on it. As a result, when the desired position is reached, the nose cone of the rocket opens and the 25 kg satellites, which are the payload, are released into space.

TEST RESULTS



When we look at the rocket's Elevation and Time graph, two curves appear. One of them is the curve of the first piece fired first, and the other is the curve of the second and third stage. Two curves were formed because it showed the second and third levels as a single level and had their graph plotted in a single curve.

The same situation arises when looking at the rocket's altitude, velocity, acceleration, and time graphs. There are two velocity curves and two height curves. We can understand that the small ones belong to that first stage, and the large curves belong to the second and third stages. As seen in the two graphs, it can be seen that the rocket made a safe landing on the ground after the parachute was opened in the altitude and velocity curves.



*So what are you waiting for?
This is just a preview of what you will be doing.*

Extra Detail Information



Reaction Control System:

The reaction control system (RCS) is a system used in spacecraft. Thrusters and reaction control wheels provide attitude control and sometimes propulsion. It can also be expressed as a reaction control system that use of directed engine thrust to provide steady-state control of an airplane making a short or vertical takeoff and landing below conventional wing flight speeds, such as a Harrier "splatter jet".

Avionics System:

Avionics is the term used in aviation for the electronic systems of aircraft, artificial satellites and spacecraft. Avionics systems include: communication, navigation, display and management of multiple systems, and hundreds of systems fitted to aircraft to perform individual functions. These systems range from a simple system such as the search spot of a police helicopter to complex systems such as airborne early warning platforms.

RENEWABLE ENERGIES (BIOMASS)

BIOMASS DEFINITION:

Biogas is the fuel obtained through living (biological) sources such as various aquatic plants by decomposing agricultural wastes, forest sector organic wastes, animal wastes (slaughterhouse wastes, feces, etc.) or city waste water in an oxygen-free environment. This type of energy is called Biomass Energy (biomass). In short, the energy obtained from organic materials in various ways is biomass energy. The oldest known raw material of this energy, which is mostly used for heating purposes, is firewood, charcoal and animal manure. In addition to this type of biomass energy obtained by the classical combustion process; It is possible to obtain biomass fuel, heat and electricity by converting from energy agriculture products, urban wastes, agricultural industry wastes to solid, gaseous and liquid fuels by using incineration process or different techniques. In other words, all substances of vegetable and animal origin, the main components of which are carbohydrate compounds, are defined as



► The rate of carbon dioxide in the atmosphere has increased by 43 percent since 1880, reaching a record level.

"Biomass Energy Source", and the energy produced from these sources is defined as "Biomass Energy". It is possible to consider biomass energy in two groups, classical and modern.

▪ First:

They are fuelwood obtained from traditional forests and plant and animal wastes used as fuel. (like dung)

▪ Latter

In other words, if modern biomass energy is; energy forestry and forest-wood industry wastes, vegetable wastes in agriculture, urban wastes, and agricultural-based industry wastes. The growth rate of some trees (poplar, eucalyptus, moonflower, paulownia king tree, etc.) is higher than natural forests. C4 (carbon) plants are plants such as sweet sorghum, sugar cane and corn, which grow in areas with high levels of sunlight, use water very efficiently, can photosynthesize even at low carbon dioxide concentrations, and are more resistant to seasonal drought than other plants. Vegetable biomass is formed as a result of the storage of green plants by converting solar energy directly into chemical energy through photosynthesis. Wood (energy forests, various trees), oilseed crops (rapeseed, sunflower, soybean etc.), carbohydrate crops (potato, wheat, corn, beet, artichoke, etc.), fiber crops (flax, kenaf, hemp, sorghum, miscanthus, etc.) etc.), protein crops (peas, beans, wheat, etc.), vegetable residues (branches, stems, straw, roots, bark, etc.), animal wastes and urban and industrial wastes are evaluated within the scope of biomass energy technologies and many solid alternatives to existing fuels, converted into liquid and gaseous fuels.

Advantages of Biomass Energy to Our World:

Biomass energy is an energy source with a great potential among alternative energy sources. It is a source that can provide continuous energy, not intermittent like wind and sun. The easy storage of biomass energy provides an advantage over other renewable energy sources. Biomass is a domestic resource, thus increasing local production and employment. Thus, it prevents migration in rural areas and does not cause an increase in CO₂ in the atmosphere. Since biomass releases as much carbon dioxide as it takes from the atmosphere when burned, it is a fuel that theoretically does not contribute to the greenhouse effect in case of regeneration of forest and plant assets. One of the current uses of biomass fuels is their mixed combustion with fossil fuels at various rates such as 2-25%. Fossil fuels reduce the pressure on air pollution when they are mixed with biomass fuels. For example, when coal is burned with 33-37% biomass in a coal-fired power plant, there is a 30% reduction in sulfur dioxide and nitrogen oxide emissions.



The Benefits Of Using Biofuels Are As Follows:

- It reduces oil imports,
- Supports sustainable energy,
- Provides the development of energy agriculture,
- It improves the socio-economic structure of the rural area,
 - Creates local job opportunities and contributes to the development of the manufacturing industry,
 - It ensures the protection of natural energy resources and the environment.
 - Biodiesel protects the engine due to its lubricant feature.
 - Since it has a high flash point temperature, it is a safe fuel to use, transport and store, it can be stored under the storage conditions of diesel and it burns cleaner than diesel.
 - With the regional and modern exploitation of biomass, it is possible to create self-sufficient energy-providing regions, especially in regions far from power lines. Energy production from biomass will create employment opportunities in rural areas, especially since it requires agricultural labor.

Although biomass energy is an environmentally compatible energy source in general, it can create some environmental effects depending on the type of biomass used. For example, the wastes generated as a result of burning garbage and similar wastes require some environmental precautions. On the other hand, such sources, which can create temporary visual environmental pollution with their storage, are disposed of as a result of their use as an energy source.


obrok token will see these needs and operate in sectors that will contribute to the world and science. we think we have answered the "why obrok question" in the best way.



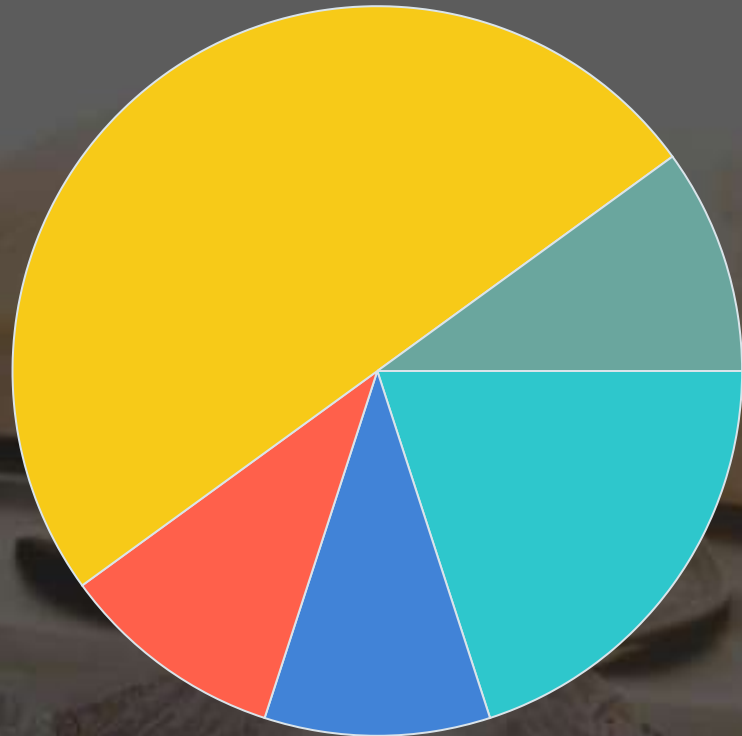
Tokenomic

General information about how the collected investment will be used, economic token distribution.

 R&D	20
 Marketing	10
 Burn	10
 Sale	50

Locked token
 allocated to
the team 10

Total Supply:
10.000.000.000.000
(10 Trillion Units)



Investment be used?

- All of the tokens reserved for the project team at 10% rate are locked, and the locked tokens will be unlocked after achieving the medium-term goals in our project.
- For the R&D process of our project: 20% tokens are reserved for managing the software, design, testing process, workshop materials and first flight processes.
- 10% tokens are reserved for marketing, promotion, advertisement, announcement, international competitions and campaigns.
- We plan to burn 10% of our tokens to protect and increase the earnings of our investors, to maintain our price balance by reducing the supply, and to organize events on various special days. We will publicly announce token burning events on all social media and communication platforms before and after the burning.
- We plan to pre-sale 50% of our total offered tokens and bring them together with buyers.

Developer Team

- ▶ **Emre BİLEN:** With his 10 years of experience, commercial skills and investment experience in the stock market, he will work to determine the investments of our company in the right direction, to make price adjustments, to determine the mission and vision of the project, to create the roadmap and to ensure the progress of the project.
- ▶ **Oğuzhan BOZKURT:** He will work as CTO in the project with his software and technical experience.
- ▶ **Osman DURMUŞ:** He will contribute to the coordination, communication, promotion and development of the project.
- ▶ **Erdinç BİLEN:** He will provide support on user support, community management, logistics.

While developing our project, we will increase the profits of the buyers with pre-sales. As the number of token holders increases, we will strengthen our project and try to take place in major coin markets and markets.



OBROK TOKEN

Disclaimer

The information provided on this page does not represent any profit guarantee trading or any other income guarantee. You should evaluate the written information in this way. Before making any investment decision, do your own financial assessment and consult your financial advisor. Although it will not bear any responsibility for incomplete or incorrect information. Also, you should know that the project and team information is correct and that we will stick to the project. Our website provides token and team information in a realistic way. User information on the site evaluated at its own risk. Cryptocurrency market involves high risks. Many blockchain applications are experimental. Working in a decentralized way It is a technology that is maintained and developed by volunteer developers. Although some applications have reached high market values, there is no guarantee of continuity. **This for reason; We want you to know that you accept all responsibilities if you make an investment and that the OBROK Token (OBROK) team will not be responsible for any material and moral damage that may occur.**

Contact information

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- Explorer:
<https://bscscan.com/token/0x205afd08cefe438377a0abc5a20cb4462e1a8c5c>

BSC
NETWORK



Social Media Accounts

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THANK
YOU!



OBROK
T O K E N