



ҚАЗАҚСТАН РЕСПУБЛИКАСЫ
ТҰҢҒЫШ ПРЕЗИДЕНТІ - ЕЛБАСЫНЫҢ ҚОРЫ

«ҒЫЛЫМ ЖӘНЕ БІЛІМ – 2017»

студенттер мен жас ғалымдардың
XII Халықаралық ғылыми конференциясының
БАЯНДАМАЛАР ЖИНАҒЫ

СБОРНИК МАТЕРИАЛОВ

XII Международной научной конференции
студентов и молодых ученых
«НАУКА И ОБРАЗОВАНИЕ – 2017»

PROCEEDINGS

of the XII International Scientific Conference
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«SCIENCE AND EDUCATION - 2017»



14th April 2017, Astana



**ҚАЗАҚСТАН РЕСПУБЛИКАСЫ БІЛІМ ЖӘНЕ ҒЫЛЫМ МИНИСТРЛІГІ
Л.Н. ГУМИЛЕВ АТЫНДАҒЫ ЕУРАЗИЯ ҰЛТТЫҚ УНИВЕРСИТЕТІ**

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The proceedings are the papers of students, undergraduates, doctoral students and young researchers on topical issues of natural and technical sciences and humanities.

В сборник вошли доклады студентов, магистрантов, докторантов и молодых ученых по актуальным вопросам естественно-технических и гуманитарных наук.

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- The possibility for claims to be presented by natural or juridical persons who suffer damage through their State of nationality or permanent residence (Article VIII)

In conclusion all states which ratified the treaties mentioned above have unlimited amount of liability for damages caused by space objects whether the state is launching state or from which territory flight occur. Moreover they are liable for activity of private non-governmental companies too. Customary law is there for some state which did not ratified treaties on liability for damages caused by space objects.

List of used sources:

- Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies- 1967
- Convention on International liability for damage caused by space objects 1972
- Article Paul San Dempsey-Liability caused by space objects under international law and national law

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MOON RESEARCH: THE FIRST MAN LANDING ON THE MOON

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The first men who land on the moon were Neil Armstrong and the pilot Edwin Aldrin. For centuries, people dreamed of visiting the Moon. These dreams became a reality in the second half of the 20th century. On July 20, 1969 history was made when men walked on the Moon for the very first time. The result of almost a decade's worth of preparation, billions of dollars of investment, strenuous technical development and endless training, the Moon Landing was the high point of the Space Age and the single greatest accomplishment ever made. Armstrong was a quiet self-described nerdy engineer who became a global hero when as a steely-nerved pilot he made "one giant leap for mankind" with a small step on to the moon. The commander Neil Armstrong and the Pilot Edwin Aldrin planted the lunar module. In the southwestern of the sea of Tranquility. They stayed on the moon about 21 hours all this time the pilot of the command module Michael Collins , First the US and the USSR sent unmanned spacecraft to the moon to photograph its surface and help determine the best sites for landings. Meanwhile, manned spacecraft were being launched into orbits around the Earth, to give people a chance to test equipment and to study the effects of space travel on the human body was waiting for them in the near moon orbit. First thing which did Neil Armstrong , he put the national symbol of USA , their flag, Neil put US flag on the moon land , and in that time it had a great meaning because of rivalry between US of America and USSR , how we know firstly USSR discovered Space and when US spacecraft landed first time in the human history it does mean that America discovered Moon. Armstrong commanded the Apollo 11 spacecraft that landed on the moon , capping the most daring of the 20th century's scientific expeditions. His first words after setting foot on the surface are etched in history books and the memories of those who heard them in a live broadcast , Armstrong said :That's one small step for man, one giant leap for mankind. Armstrong and Edwin "Buzz" Aldrin spent nearly three hours walking on the lunar surface, collecting samples, conducting experiments and taking photographs .Mission planners at NASA studied the lunar surface for two years, searching for the best place to make the historic landing and it was very difficult. Using high-resolution photographs taken by the Lunar Orbiter satellite and close-up photographs taken by the Surveyor spacecraft before the landing spacecraft on the moon was done a decade of hard work, they narrowed the initial thirty sites down to three. Influencing factors included the number of craters and boulders, few high cliffs or hills, and a

relatively flat surface. The amount of sunlight was also a factor in determining the best time to land on the lunar surface and also one of the difficulty was less knowledge about moon. US government for discovering moon laid out and sponsored NASA billions of dollars because of space rivalry ,two big power USA and USSR had a strategic plan how to discover and mainly firstly open moon space. But when we think commonly what was happened on July 20, 1969 and what did Neil Armstrong and pilot Edwin Aldrin , it really effects the human mind the mankind go out from the Earth and discovered an another planet , this discovering was not only for America , it was done for all mankind. And also we should say that Apollo 8 was the first crewed Saturn V launch and the first time humans were placed in lunar orbit. Mission plans called for the astronauts to photograph possible landing sites for future missions. Before this, only robotic probes had taken images of the Moon's far side.

Moon researching

Firstly we should say that Moon has a great value and meaning for all mankind and especially for states and nowadays we can see that big states trying to post or land their lunar rover and satellite on the Moon. But here is one question we do we need to the Moon? , what are there? Why we are searching and spending a lot of money for researching programs? Here is the answer , now I will try to explain you the reasons. At first I will say that Moon its satellite of our planet Earth. from the ancient time the Moon was the object of discussing , researching and arguing of scientists. While there are only two basic types of regions on the Moon's surface, there are many interesting surface features such as craters, mountain ranges, rilles, and a zone. Although it isn't known for certain, many lunar geologists believe the Moon may have a small iron core, even though the Moon has no magnetic field. By studying the Moon's surface and interior, geologists can learn about the Moon's geological history and its formation , the interest of people to visiting the Moon and the Space increasing day by day, it named Space tourism , how we know quantity of hydrocarbons , petroleum , oil and minerals day by day decreasing in our planet and we should find it in somewhere else and next reason is closely connected with this aspect , secondly and one of the main reason why states trying to learn and mastering the Moon is the possibility of existing in the bowels of the Moon Petroleum or Naphtha and also some scientist writing in their doctrines that there a lot of expensive precious stone , hydrocarbons. And of course every states want to find and pick up something valuable on the Moon , and here is also one reason for mastering the Moon , it is military deployment but fortunately we have several agreements between states that prohibits accommodation of deployment of any type of weapons of mass destruction on the Moon and Space territory for example: Treaty on principles governing the activities of states in the use and exploration of outer space , including the Moon and other celestial bodies (1966) , Agreement on the activities of states on the Moon and other celestial bodies, and other agreements.

Responding to the Soviet program of space exploration, US President in 1961 told the U.S. Congress : I believe that this nation should commit itself to achieving the goal, before this decade is out, of landing a man on the Moon and returning him safely to the Earth. The same year the Soviet leadership made some of its first public pronouncements about landing a man on the Moon and establishing a Lunar base. During the first Lunar race of the 1960s and also a little later, two cosmic superpower the USA and USSR , had plans to build lunar bases that had not been realized. Exploration of the lunar surface by spacecraft began in 1959 with the Soviet Union's Luna program. Luna 1 missed the Moon, but Luna 2 made a hard landing into its surface, and became the first artificial object on an extraterrestrial body. The same year, the Luna 3 mission radioed photographs to Earth of the Moon's hitherto unseen far side, marking the beginning of a decade-long series of unmanned Lunar explorations. In the USA worked out the outlines of the Lunex-project and Horizon. In the first half 1970s Soviet scientists from Moscow and Leningrad worked out a project of a long term lunar base, in which, in particular the possibilities of encircling the habitable structures with a directed explosion for protection against cosmic radiation were studied, in more detail a project of Soviet Lunar base «Zvezda» was developed which was implemented in 1970s-1980s. The Soviet manned lunar programs failed to send a manned mission to the Moon. However, in 1966 Luna 9 was the first probe to achieve a soft landing and return close-up shots of the Lunar

surface. Luna 16 in 1970 returned the first Soviet Lunar soil samples, while in 1970 and 1973 during the Lunokhod program two robotic rovers landed on the Moon. Lunokhod 1 explored the Lunar surface for 322 days, and Lunokhod 2 operated on the Moon about four months only but covered a third more distance, and we can name several exploration of the Moon for example: China has begun the Chinese Lunar Exploration Program for exploring the Moon and is investigating the prospect of lunar mining, specifically looking for the isotope helium-3 for use as an energy source on Earth. China launched the Chang'e 1 robotic lunar orbiter on October 24, 2007. Originally planned for a one-year mission, the Chang'e 1 mission was very successful and ended up being extended for another four months. And also Japan is doing his steps for exploring the Moon for example In 1990 Japan visited the Moon with the Hiten spacecraft, becoming the third country to place an object in orbit around the Moon. And it was something incredible the spacecraft released the Hagoromo probe into lunar orbit, but the transmitter failed, thereby preventing further scientific use of the mission. In September 2007, Japan launched the SELENE spacecraft. And one of the technically progressive country India, India's national space agency, Indian Space Research Organisation launched Chandrayaan-1, an unmanned lunar orbiter, on October 22, 2008. The lunar probe was originally intended to orbit the Moon for two years, with scientific objectives to prepare a three-dimensional atlas of the near and far side of the Moon and to conduct a chemical and mineralogical mapping of the lunar surface, among its many achievements was the discovery of the widespread presence of water molecules in lunar soil.

In Conclusion i want to say that, nowadays many countries trying to make some plans, projects for mastering the Moon or to build some lunar rover for example

we can name these countries superpowers: United states of America, Russian federation, Republic of India, China democratic republic, Japan and others and also in the process of mastering the Moon there are several big space companies that helps states, there are: NASA (National Aeronautics and Space Administration), European space agency, Roskosmos and others, but our common goal is the same, research and use Moon and Space for the benefit of all mankind

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