

банить», *спам* – «масаж», *крокозябля* – 1) «страшна дівчина»; 2) «дружина крокозяблика».

Отже, масова комп'ютеризація сприяє активному розвитку комп'ютерного сленгу, який проникає в мовне життя багатьох мовців.

## КАФЕДРА ІНОЗЕМНОЇ МОВИ

### CLASSIFICATION OF SPACECRAFTS

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A spacecraft is any vehicle capable of traveling in outer space. Advances in technology have created a variety of scientific spacecraft for countless missions in an attempt to learn more about the wondrous things that make up our universe. Although spacecraft are uniquely built for their specific missions, they can be categorized based on where they gather information.

#### **Flyby Spacecraft(космічний апарат для спостережень)**

Orbiting the sun, a flyby spacecraft quickly collects information from targets that it passes. It stores the data and transmits it to earth when its antennas are correctly positioned. A flyby spacecraft is designed for long periods of interplanetary travel. Some examples of flyby spacecraft are the Stardust, Mariner 2, and Voyager 2.

#### **Orbiter Spacecraft(орбітальний космічний апарат)**

An orbiter spacecraft gathers information about a planet by entering its orbit. This requires a large propulsive capacity to sufficiently decelerate it at the exact moment as it enters. In addition, orbiting another planet means that solar occultations, or times when the planet blocks the spacecraft from sunlight, will occur. A solar occultation causes extreme temperature variation in the spacecraft and also prevents solar panels from generating power. In addition, Earth occultations prevent data from being transmitted to Earth until a later time. An orbiter spacecraft provides for these difficulties, allowing

an in-depth study of various planets. Examples include the Magellan (Venus), Cassini (Saturn), and Galileo (Jupiter).

### **Atmospheric Spacecraft(атмосферний космічний апарат)**

An atmospheric spacecraft is usually brought to its destination by another spacecraft in order to collect information about the planet's atmosphere. Therefore, the spacecraft often does not require a propulsion subsystem, although it does need an electric power supply and equipment for gathering data. The spacecraft uses a parachute to slow its decent, and has an aeroshell that protects it from extreme temperatures during atmospheric entry. Information collected include the atmosphere's composition, temperature, pressure, density, cloud content and lightning. Examples include the Galileo Atmospheric Probe (Jupiter), Mars Balloon (Mars), and Pioneer 13 (Venus).

### **Lander Spacecraft(планетарний космічний апарат)**

A lander spacecraft lands on the surface of a planet or moon and transmits information back to Earth. It may have a powered descent and landing or use a parachute to reach the surface. Because of possible harsh conditions at the landing sites, this is a dangerous mission. Upon arriving, the spacecraft performs chemical composition analyses and takes color photographs of the surface and telemeters data back to scientists on Earth. A rover is a special type of lander spacecraft in that it is a semi-autonomous vehicle that can be steered from Earth. It may also be solar-powered. Examples of Lander spacecraft include the Viking (Mars), Venera 13 (Venus), and Surveyor (Moon).

### **Penetrator Spacecraft(проникаючий космічний апарат)**

A penetrator spacecraft is designed to slam into the surface of a body to gather information. It must be able to withstand a high-velocity impact in order to obtain the information to be sent back to the mother ship for transmission to Earth. As of 2004, no penetrator spacecraft has been successful. However, the Deep Impact mission plans to penetrate a speeding comet in 2005.

### **Observatory Spacecraft(космічна обсерваторія)**

An observatory spacecraft gathers information about targets from an earth or solar orbit. This prevents the Earth's atmosphere from

obscuring data. Examples of observatory spacecraft include the HST, Chandra, and Compton.

## **METHOD OF RECORDING AND CAPTURING IMAGES**

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Photography" is derived from the Greek words *photos* ("light") and *graphein* ("to draw"). The word was first used by the scientist Sir John F.W. Herschel in 1839. It is a method of recording images by the action of light, or related radiation, on a sensitive material.

On a summer day in 1827, it took eight hours for Joseph Nicéphore Niépce to obtain the first fixed image. About the same time a fellow Frenchman, Louis Jacques Mandé Daguerre was experimenting to find a way to capture an image, but it would take another dozen years before he was able to reduce the exposure time to less than 30 minutes and keep the image from disappearing... ushering in the age of modern photography.

Louis-Jacques-Mandé Daguerre, inventor of the first practical process of photography, was born near Paris, France on November 18, 1789. A professional scene painter for the opera, Daguerre began experimenting with the effects of light upon translucent paintings in the 1820s. In 1829, he formed a partnership with Joseph Nicéphore Niépce to improve the process Niépce had developed to take the first permanent photograph in 1826-1827. Niépce died in 1833.

After several years of experimentation, Daguerre developed a more convenient and effective method of photography, naming it after himself -- the daguerreotype. The daguerreotype was a positive-only process allowing no reproduction of the picture. Preparation of the plate prior to image exposure resulted in the formation of a layer of photo-sensitive silver halide, and exposure to a scene or image through a focussing lens formed a latent image. The latent image was made visible, or "developed", by placing the exposed plate over a slightly heated (about 75C) cup of mercury.