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NASA abbreviations and acronyms: translation aspect

Examples of acronyms and abbreviations in the NASA terminology system are proposed. The specific features of their translation are determined, which will affect the language training of aviation specialists. The problem of interdisciplinary homonymy of the NASA acronym is considered.

Translation of abbreviations and acronyms in the NASA terminology system is an important part of the language training of aviation professionals. Since NASA is one of the leading organisations in the field of aerospace research, many of the terms and abbreviations used in this organisation are standard for the entire aviation industry.

NASA (National Aeronautics and Space Administration) is the United States agency responsible for the civilian space program and space exploration [6]. Due to the large number of projects and programs being developed and implemented at NASA, there are a large number of terms and abbreviations.

One of the ways to create aviation terms is through abbreviation. The intensive use of abbreviations is primarily due to extra-linguistic factors, in particular, the intensification of Ukraine's international relations in the field of aircraft construction, air traffic management, and the country's cooperation with international organisations such as ICAO and IATA. The emergence of a significant number of complex syntactic structures to denote certain aerospace concepts somewhat overloads the language, making it less flexible and inconvenient to use. In addition, some nominations are so cumbersome that they are very difficult to use. In this connection, in the modern language, the intralinguistic factors are in effect. The most important of which is the law of saving linguistic energy and linguistic means [2].

That is why abbreviations as acronyms are very common in the NASA terminology. Abbreviations are shortcuts that used to denote words or phrases, for example, ISS (International Space Station) [3, p. 47]. Acronyms are a type of abbreviation that consists of the first letters of different words and is read together as one word: NASA (The National Aeronautics and Space Administration) is pronounced [ˈnæsə], not [en-er-es-eɪ].

However, there are also funny ways of decoding the NASA acronym. For example, Need Another Seven Astronauts; Need Another Shuttle, Also; Nobody Admires Scientists Anymore; No Analytic Scientists Allowed.

A characteristic feature of a terminological abbreviation is that it is used as a parallel variant of multicomponent terms. At the same time, monosyllabic terms are not abbreviated, as they are quite convenient and concise in use [4, p. 136]. The peculiarity of translating abbreviations and acronyms in the NASA terminology system is that they can have more than one meaning [1]. For example, the

abbreviation "ACE" can stand for Advanced Composition Explorer (програма дослідження космічних променів) or Active Cavity Radiometer Irradiance Monitor Satellite (супутникова місія для вимірювання сонячної радіації) [4]. Such abbreviations can be problematic in translation, as the relevant context may be untranslatable.

In addition, the NASA terminology system has abbreviations that have similar or identical letter components but different meanings [1]. For example, "MSL" can mean Mars Science Laboratory or Mean Sea Level [6]. In such cases, it is important to identify the context of use and the corresponding meaning.

It is also important to keep in mind that some acronyms may have specific usage in the NASA terminology and may change over time. For example, the acronym "GPS" originally stood for "Global Positioning System", but eventually changed to "Global Navigation Satellite System" to reflect the expanded functionality of the system [6].

In the modern terminology of the aviation industry, acronyms are quite widespread in English, which are completely identical in both letter and sound composition to commonly used words. This group of acronyms can be called homonymous acronyms.

Acronyms-monomonyms are pronounced words specially formed for the nomination - as a rule, in the conditions of limited language groups (most often professional groups) - of some transient phenomena that actually exist only for a short time, such as specific models of technical aviation devices that are replaced in the course of scientific and technological progress, or aviation research programmes that cease to exist after their implementation [5].

One should be aware of the clear determination of the place of such terms in the terminology system, their belonging to a certain lexical and semantic field, a specific field of functioning, as well as the complete absence of links between the meanings of terms and the meanings of their consonant common words [5]. However, it should not be forgotten that when translating an acronym-homonym, the problem of inter-sectoral homonymy may arise. In this case, attention should be paid to deciphering the acronym in different industries.

For example, consider the acronym NASA. It is usually associated with the US National Aeronautics and Space Administration. However, in other industries, this acronym can have other meanings:

- National Association of Insurance and Financial Advisors - in the insurance and finance industry.
- National Association of Student Councils - in the field of education and student leadership.
- National Association of Secondary School Principals - in education and school leadership.
- National Association of State Archives and Records Administrators - in the field of archives and document management.
- National Association of Community Health Centers - in the healthcare industry.
- National Association of Document Examiners - in the field of law and criminalistics.

- National Association of Students of Architecture - in the field of architecture and design.

Of course, the context in which the NASA acronym is used helps to understand what exactly is meant.

To sum up, we can say that translation of abbreviations and acronyms in the NASA terminology system has its own peculiarities related to unique abbreviations, ambiguity and specific usage. Therefore, to ensure accurate translation, it is necessary to take into account the context of use and, if necessary, refer to additional aviation industry sources. To solve the problems caused by the homonymy of English-language terminological acronyms, in particular in aviation scientific and technical texts, it is necessary to take into account the broad context and compatibility of abbreviations.

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