O.K. Katerna, PhD, G.G. Yencheva, PhD (National Aviation University, Ukraine)

Translation procedures, strategies and methods of aviation terminology

Today translation is a highly-developed practice and there are plenty of perspectives and classifications, systemizing the various approaches to it. The article is a practical research of the translation procedures, strategies and methods of aviation terminology.

In spite of onrush development of aviation industry around the world and the cooperation of Ukrainian airlines with international ones, a lot of aviation terms have appeared. This trend requires a correct approach in their translation. Obviously, being new, they do not have correspondences in the Ukrainian language, therefore such terms can be attributed to the non-equivalent vocabulary.

Famously, there is no direct correspondence between the units of the vocabulary of the two languages (English and Ukrainian). Every word of any language is unique and specific. However, this does not mean that there is nothing in common between the lexical units of Ukrainian and English. The translation of the word begins with an attempt to find in another language words that coincide with a particular word in meaning. If we need to translate the English word "lock", we may determine that this word can mean "*замок*", "*затвор*", "*илюз*" etc. A list of words with which we convey the meaning of this word in Ukrainian can be continued, but no one can say that the word lock means, for example "*ключ*".

Translation of special branch terminology, including aviation, is carried out in various ways, namely with the help of such interlingual transformations: lexical, lexical-semantic and lexical-grammatical. The main task of an interpreter is to correctly select one or another method during the translation process in order to accurately convey the meaning of each term [1, 2, 3, 5, 11, 12].

From the point of view of the practice of translation, all elements of the denotative system of the source language (lexical and phraseological units) are divided into two groups [4, 7]:

1) those that already have correspondences ("transfer equivalents") in the target language (for example "bleep" - short sound of high tone signal)

2) those that (still) do not have correspondences in the target language.

The first are called units that have translational equivalents in the target language, and the second are non-equivalent.

Equivalent units divided into one-level ones (having only one translation correspondence, for example "logarithm" – "логарифм", kinestatics – "кінестатика") and many equivalent (having two or more transfer correspondences, for example, "effect" – "ефект", "явище", "вплив", "наслідок", "трикотажсне переплетіння"; "gaging" – "вимірювання", "замір", "контроль", "перевірка", "калібрування", "градуювання" (keep in mind that there are dictionary matches, whereas the correspondence of a specific word or phrase of the original in the text can only be one of several).

Equivalent lexical and phraseological units (not completely) are represented in dictionaries and texts (that is, not yet fixed in dictionaries), but exist in the translation language as transferable equivalents.

One of the simplest lexical ways to translate an aviation term is the transcoding method. Transcoding is a letter or phoneme transfer of the original lexical unit using the alphabet of the translation language. This technique is commonly used to translate English aviation terminology, the spelling system of which is very different from Ukrainian and assumes, first of all, the transmission of the sound form of the term, and only then - its lexical meaning.

Transcribing and transliteration are ways of translating the lexical unit of the original by recreating its form using the letters of the translation language. During transcribing, the sound form of a foreign word is reproduced, and in transliteration - its graphic form (alphabetic composition). The main way in modern translation practice is transcription with preservation of some elements of transliteration. Most often, this method of translation is used for the transfer of proper naming unit and names, do not change their form when transferred to a foreign language text.

Calquing – translating a lexical unit by replacing its constituent parts - morphemes or words - with their lexical correspondences in the target language; while the new word copies the structure of the lexical unit of the source language.

Calquing (word to word or literal translation) is s a method of translating new words (terms) when the analogue of a simple or (more often) complex word (term) of the source language in the target language is chosen, as a rule, the first-inorder correspondence in the dictionary, for example: "line service" – "лінійна служба", toxic shock syndrome – "токсичний шоковий синдром", Big Bang – "Великий вибух", floating zero – "плаваючий нуль". In these examples, Ukrainian correspondences of English terms are formed by choosing the first dictionary correspondence of each of the components.

Calquing as a method of translation is often used at translation of complex words (terms). Quite often, the calquing is applied at translation into that complex that is most common popular words: target search – "*nouyk цілі*", drafting table – "*креслярський стіл*", self-loading- "*самозавантаження*".

Calquing can be used only when the translation conformity does not violate the norms of use and compatibility of words in the Ukrainian language.

Generalization is the replacement of the original language unit, which has a narrower meaning, a unit of translation with a wider meaning. Generalization is used in those cases when:

a) the specific name of an object does not say anything about the translation;

b) is superfluous in the condition of this context;

c) the general meaning is more acceptable for stylistic reasons.

Concretization is the process opposite to generalization - is used when something in the target language is usually expressed using concepts with narrower meaning or when preserving the original concepts with broader meaning would result in an awkward translation. In many cases, the use of concretization is due to the fact that there is no word with the same broad meaning in the translation language. So, the word "thing" has a very abstract meaning and when translated into Ukrainian it has to be specified because of the narrowing of the meaning: "предмет", "факт", "випадок", "створіння" etc. [4].

In the translation of aviation terminology, the transformation of the concretization is not commonly used, since the terms have sufficiently specific meanings, the translator must retain. But here are some examples: "fan cascade door" – "зовнішня стулка реверсу тяги вентилятора" [10, с. 97], "mirror for downward visibility" – "дзеркала для обзору нижньої півсфери" [10, с. 145], "normal capacity" – "продуктивність при нормальних умовах".

Descriptive translation is a method of translating new lexical elements of the source language, when a word, phrase, term or phraseology is replaced in the translation language by a phrase (or a large phrase by the number of components) that adequately conveys the meaning of the word or phrase ("wet leasing" – "довгострокова оренда повітряного судна з екіпажем і технічним обслуговуванням").

Descriptive translation has the following requirements:

- the translation should accurately reflect the main content of the concept denoted by the neologism;

- the description should not be too detailed;

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- the syntactic structure of the phrase should not be complicated.

When applying a descriptive translation, it is important to ensure that the phrase in the translation language should be accurately and fully conveys all the main features of the concept indicated by the word of the original (the term "outscriber" has the following main features: "вихід", "записування", "пристрій", and therefore, during translating by a descriptive way, all these main features must be retained, "outscriber" – "вихідний пристрій відтворення даних").

The results of the analysis of translation methods of aviation terminology are presented in table 1.

Table 1.

Translation methods of aviation terminology		
Translation methods	Number of terminology	Percentage, %
Calquing	40	32,26
Correspondence dictionary	23	18,55
Descriptive	20	16,13
Transliteration	18	14,52
Concretization	10	8,06
Transcribing	8	6,45
Generalization	5	4,03
Total	124	100

[Source: developed by the authors on the basis of dictionaries: 8, 9]

It is advisable to note that calquing, as a way of creating new linguistic units, is the commonly used. Calquing is more often used during translation of complex words and terms, often this method of translation is used for one of the components of complex words. In most cases, during translation of aviation terms is commonly used the word-formative calque and semi- calquing.

The word-forming calque is a word or a term that arises by literally translating words into Ukrainian from a foreign language simply in parts: prefix, root, suffix. As a rule, such calque is not perceptible to native speakers. Examples of such calque among aviation terms are: "ground support equipment" – "засоби наземного обслуговування", "space shuttle" – "космічний корабель", "angle of attack" – "кут атаки", "flight hours" – "години нальоту".

Semi- calquing is a type of calculating in which only one element of a phrase or word is literally translated. Usually this type is commonly used in the translation of terms. Examples: "allweather operation" – "всепогодні польоти", "shock wave" – "ударна хвиля", "мала авіація" – "general aviation", "aneroid capsule" – "анероїдна коробка", "tape display" – "стрічковий індикатор".

The methods of translation and interpretation of aviation terminology are presented in Fig. 1.



Fig. 1. Graphic interpretation of the translation methods of aviation terminology *[Source: developed by the authors according to the previous analysis]*

We note that such methods of translation as calquing, correspondence dictionary and descriptive is quite successful and most applicable for the translation of aviation terminology.

Generalization method during translation of aviation texts, as well as concretization, is not used enough. This is due to the fact that in case of transfer of terms their meaning should be transmitted as accurately as possible and more precisely. But sometimes, depending on the context, as well as the peculiarities of using a term in this context, translators still resort to generalization in the translation of aviation terminology: "exploded view diagram showing major components" – "схема технологічних роз'ємів", "flight control and monitoring" – "системи управління польотом".

Analyzing the views of scientists on these lexical techniques, we can assume that they all play a significant role in achieving the adequacy of the translation of aviation literature.

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