A COMPARATIVE ANALYSIS OF AVIATION TERMINOLOGY IN ENGLISH AND UZBEK

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Abstract.

This article compares the aviation terminology of English and Uzbek, looking at how terms are formed, how they move from one language into the other, and what problems appear when they are translated. English is the working language of international civil aviation, so most new aviation concepts are named in English first. Uzbek receives these concepts partly through Russian and partly directly from English, and the result is a mixed terminological system. Using a sample of terms taken from ICAO documents and Uzbek aviation usage, the study identifies the main ways Uzbek equivalents are created: native words, calques, descriptive compounds, borrowings via Russian, and abbreviations kept in their original form. The article argues that consistent standardisation and better-designed bilingual glossaries are needed to support pilots, controllers, engineers and translators.

Keywords: *aviation terminology, term formation, calque, borrowing, Aviation English, Uzbek terminology, translation equivalence, standardisation.*

Annotatsiya.

Maqolada ingliz va o‘zbek tillaridagi aviatsiya terminologiyasi qiyosiy jihatdan tahlil qilinadi. Terminlarning yasalish usullari, bir tildan ikkinchisiga o‘tish yo‘llari hamda tarjimada uchraydigan muammolar ko‘rib chiqiladi. Xalqaro fuqaro aviatsiyasida ingliz tili asosiy ish tili bo‘lgani uchun yangi tushunchalar odatda avval ingliz tilida nomlanadi. O‘zbek tili bu tushunchalarni qisman rus tili orqali, qisman bevosita ingliz tilidan qabul qiladi. Tadqiqot natijasida o‘zbek tilida ekvivalent hosil qilishning asosiy usullari – o‘z qatlam so‘zlari, kalka, tavsifiy birikmalar, rus tili

orqali o‘zlashmalar va qisqartmalar – aniqlandi. Muallif terminlarni standartlashtirish va ikki tilli lug‘atlarni takomillashtirish zarurligini asoslaydi.

Kalit so‘zlar: *aviatsiya terminologiyasi, termin yasalishi, kalka, o‘zlashma, aviatsiya ingliz tili, o‘zbek terminologiyasi, tarjima ekvivalentligi, standartlashtirish.*

INTRODUCTION

Few professional fields depend on precise language as much as aviation does. A misunderstood instruction between a pilot and an air traffic controller can have serious consequences, and the history of aviation accidents includes several cases where language played a part. For this reason the International Civil Aviation Organization (ICAO) introduced language proficiency requirements for pilots and controllers and made English the common language of international radiotelephony (ICAO, 2010). As a result, English aviation terminology has become a kind of international standard that other languages have to deal with in one way or another.

Uzbekistan has a growing civil aviation sector. New routes are being opened, airports are being modernised, and more specialists are being trained at home and abroad. All of this increases the need for a clear and stable Uzbek aviation terminology. At the same time, the Uzbek terminological system is still in transition. For decades technical terms came into Uzbek mainly through Russian, while today more and more terms come straight from English. This creates parallel forms, inconsistent usage and real difficulties for translators and learners.

The aim of this article is to compare English and Uzbek aviation terms, describe the main ways Uzbek equivalents are formed, and point out the problems that arise in translation and standardisation. The study is relevant both for terminology theory and for practical work such as teaching Aviation English and compiling bilingual dictionaries.

LITERATURE REVIEW

Modern terminology studies go back to the work of Eugen Wüster, who saw the term as a unit tied to one clearly defined concept and stressed the importance of standardisation (Wüster, 1979). Later scholars questioned how strict this view should be. Cabré (1999) described terms as lexical units that behave like other words but are used in specialised communication, while Temmerman (2000) showed that many specialised concepts are fuzzy and change over time, so terms cannot always be fixed once and for all. Sager (1990) offered a practical framework for collecting, describing and processing terms, which is still useful for comparative work. In the Russian tradition, Superanskaya, Podolskaya and Vasilyeva (2012) gave a detailed account of term formation, including borrowing, calquing and semantic transfer.

Aviation English itself has been studied as a restricted, highly regulated variety. Estival, Farris and Molesworth (2016) describe it as a lingua franca with its own phraseology, pronunciation rules and communicative norms. ICAO documents, especially Annex 10 and Doc 9835, set out standard phraseology and explain why plain language must be used carefully (ICAO, 2010, 2016). In Uzbek linguistics, the general principles of term creation and the role of native and borrowed elements were discussed by A. Hojiyev (1985) and other scholars, but aviation terminology as a separate field has received relatively little attention. This gap is one of the reasons for the present study.

MATERIALS AND METHODS

The material for the study was a sample of English aviation terms selected from ICAO documents and from widely used Aviation English materials, together with their Uzbek equivalents as they appear in Uzbek aviation usage, airport information and specialised texts. The terms cover several thematic groups: aircraft structure, flight operations, air traffic control, airport services and meteorological information.

Three methods were used. The comparative method helped to match each English term with its Uzbek counterpart. Structural and word-formation analysis showed how each term is built (simple word, compound, phrase or abbreviation). Translation analysis, based mainly on Newmark's (1988) categories, was used to classify the way the Uzbek equivalent was produced: borrowing, calque, descriptive translation or the use of a native word.

RESULTS

The analysis showed that English aviation terms are mostly short and compact. Many of them are simple words (wing, flap, gear), compounds (runway, airspeed, cockpit) or noun phrases (air traffic control, missed approach). Abbreviations and acronyms are extremely common: ILS, VOR, ATC, ETA, METAR, NOTAM and many others. English often uses conversion and phrasal verbs as well, for example to taxi, to go around, to hold short, which have no direct one-word equivalents in Uzbek.

Uzbek equivalents, by contrast, tend to be longer and more descriptive. Where English has one compact word, Uzbek often uses a phrase built with the possessive or attributive construction. The table below shows typical examples from the sample.

Table 1. English aviation terms and their Uzbek equivalents

English term	Uzbek equivalent	Way of formation
aircraft	havo kemasi	calque (word-for-word)
runway	uchish-qo‘nish yo‘lagi	descriptive compound
flight	parvoz	native word (via Persian)

English term	Uzbek equivalent	Way of formation
wing	qanot	native word
crew	ekipaj	borrowing via Russian (from French)
landing gear	shassi	borrowing via Russian (from French châssis)
fuselage	fyuzelyaj	borrowing via Russian (from French)
engine	dvigatel	borrowing via Russian
air traffic control	havo harakatini boshqarish	calque with grammatical restructuring
air traffic controller	dispetcher	borrowing via Russian (narrower/wider meaning)
flight recorder (black box)	bort qayd qurilmasi / “qora quti”	descriptive term / calque of colloquial name
emergency landing	favqulodda qo‘nish	calque
take-off	uchish, havoga ko‘tarilish	native verbal noun
boarding	bortga chiqish	hybrid (borrowed + native)

English term	Uzbek equivalent	Way of formation
fuel	yoqilg‘i	native word
airline	aviakompaniya	borrowing via Russian (compound)
ILS (Instrument Landing System)	ILS / asboblar yordamida qo‘nish tizimi	abbreviation kept + explanatory translation
METAR	METAR	direct borrowing of code (untranslated)

Based on this material, five main ways of forming Uzbek aviation terms can be identified.

1. Native words. Some basic concepts are named with words that already existed in Uzbek: qanot (wing), parvoz (flight), yoqilg‘i (fuel), uchuvchi (pilot). These terms are easy to understand and fit naturally into the language, but their number is limited.

2. Calques. Many terms are translated part by part. Havo kemasi (aircraft, literally “air ship”) and favqulodda qo‘nish (emergency landing) are good examples. Calques keep the inner logic of the original term and are generally clear for Uzbek speakers. Some of them, however, were calqued from Russian rather than English, which explains why their structure sometimes follows Russian models.

3. Descriptive compounds. When there is no single Uzbek word for the concept, a descriptive phrase is created. Uchish-qo‘nish yo‘lagi for runway is a typical case: the Uzbek term explains the function of the object (a strip for taking

off and landing), while the English word is a short compound. Such terms are transparent but long, which is a real disadvantage in radio communication, where every second counts.

4. Borrowings via Russian. A large part of the technical vocabulary came into Uzbek through Russian: shassi, fyuzelyaj, ekipaj, dvigatel, dispetcher, aviakompaniya. Many of these words are originally French or Latin. They are well established among specialists and are often preferred in technical practice, even when a native alternative exists. In some cases the borrowed word does not match the English term exactly. Dispetcher, for instance, covers a wider range of jobs in Uzbek than air traffic controller does in English.

5. Abbreviations and codes. International abbreviations such as ILS, VOR, METAR and NOTAM are usually kept in their Latin form. This is natural, because these codes are used in international documents, charts and radio exchanges and must be the same everywhere. When an explanation is needed, an Uzbek descriptive translation is added, for example ILS – asboblar yordamida qo‘nish tizimi.

DISCUSSION

The results show that Uzbek aviation terminology is built on three layers: native vocabulary, the older Russian-based layer, and a newer layer that comes directly from English. This mix is not a problem in itself. Most terminological systems in the world have a similar history. The difficulty is that the layers often compete. A single concept may have two or three names, and different organisations, textbooks and translators may choose different ones. For a learner or a young specialist this is confusing, and for a translator it means constant uncertainty about which equivalent is “correct”.

Another issue is the difference in structure. English terms are short and fit well into standard radio phraseology. Uzbek descriptive terms are clear but long, so they are more suitable for documents, manuals and training than for real-time

communication. Since international radiotelephony is conducted in English anyway, this is less of a problem for pilots and controllers, but it matters for domestic documentation, passenger information and education.

Phrasal verbs and multi-word expressions cause special difficulty. Expressions such as go around, hold short of the runway or line up and wait carry a fixed, standard meaning in ICAO phraseology. A word-for-word translation can easily lose this meaning, so translators have to rely on functional equivalents and, ideally, on officially approved glossaries. Partial equivalence is also a risk: when an Uzbek term covers a wider or narrower meaning than the English one, as with dispetcher, misunderstandings can appear in technical texts.

These observations lead to some practical suggestions. First, a unified bilingual (or trilingual English–Uzbek–Russian) aviation dictionary, approved by the relevant authorities, would reduce variation. Second, international abbreviations should be kept unchanged, with a short Uzbek explanation where needed. Third, when a new term is created, preference should be given to forms that are short, transparent and easy to pronounce. Finally, Aviation English courses for Uzbek learners should pay explicit attention to false equivalents and to terms that do not match one-to-one.

CONCLUSION

The comparison of English and Uzbek aviation terminology shows clear differences in structure and origin. English terms are compact, rich in compounds, phrasal verbs and abbreviations, and they serve as the international standard. Uzbek terms are formed through native words, calques, descriptive compounds, borrowings via Russian and unchanged abbreviations, which makes the system rich but not always consistent. The main challenges are synonymy, partial equivalence and the length of descriptive terms. Systematic standardisation, reliable bilingual glossaries and terminology-aware teaching are the most effective ways to address them. Further research could focus on a larger corpus of texts, on the usage of terms by

working specialists, and on the role of English-medium training in shaping new Uzbek aviation vocabulary.

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