



International Journal of
MULTILINGUAL EDUCATION

ISSN: (Print) ISSN 1987-9601

(Online) E ISSN 1512-3146

Journal homepage: <http://multilingualeducation.org/>

Georgian Aviation Terminology in the Multilingual Spectrum

Marine Osadze

Ivane Javakhishvili Tbilisi
StateUniversity, Georgia

Email:marine.osadze@tsu.ge

Robert Khachidze

Georgian Aviation University,
Tbilisi, Georgia.

Email: r.khachidze@gmail.com

Natela Muxashvili

Ivane Javakhishvili Tbilisi
StateUniversity, Georgia

Email:natela.muzashvili@tsu.ge

Vazha Kelikhashvili

Georgian Aviation University,
Tbilisi, Georgia

Email:v.kelikh@gmail.com

To cite this article: Marine Osadze, Natela Muzashvili, Robert Khachidze, Vazha Kelikhashvili (2023):Georgian Aviation Terminology in the Multilingual Spectrum: International Journal of Multilingual Education, #22; DOI: 10.22333/ijme.2023.22000;pp. 1-9.

To link to this article: <https://doi.org/10.22333/ijme.2023.22001>

Marine Osadze, Natela Muzashvili

Arnold Chikobava Institute of Linguistics, Ivane Javakhishvili Tbilisi State University, Georgia

Robert Khachidze, Vazha Kelikhashvili

Georgian Aviation University, Tbilisi, Georgia

Georgian Aviation Terminology in the Multilingual Spectrum

ABSTRACT

Georgian aviation has a long history of development and, therefore, related terminological activities have been under way for that period. A number of glossaries of terms have been appeared since then, particularly, the one published in 2002, which laid the foundation for subsequent terminological endeavors like *A Learner's English-Georgian Picture Glossary of Aviation Terms*.

The aimed at solving a number of problems in the domain of aviation, primarily, to bring together terms used in the educational process. It is notable that the new glossary will feature more recent illustrations, and new data will be compared with their earlier counterparts.

In the Soviet period, aviation terms were translated predominantly from Russian. The new glossary will be bilingual (English-Georgian) and new Georgian terms will be tailored in accordance with their English equivalents.

One of the advantages of the glossary is that illustrations will be presented thematically featuring principal terminological items as they are attested in various lexicographic sources and aviation documentation. It is noteworthy that the image bank of EASA training modules was officially purchased for the creation of the glossary, since aviation universities all over the world, including those in Georgia, use EASA training modules for their teaching activities.

The abounding data of aviation terms, included in the picture glossary, will be added to the Term Bank which have been developed at Arnold Chokobava Institute of Linguistics, TSU, in 2014. Previously published glossaries are already included in the Term Bank.

A Learner's English-Georgian Picture Glossary of Aviation Terms should appear in print. It will be a significant resource both for professionals in the field and for students.

The glossary will greatly contribute to fostering, development, full-fledged functioning of Georgian terms of aviation in the multilingual spectrum.

Keywords: *aviation terminology; Georgian; glossary*

Introduction

In our days, the industry of aviation develops at a very rapid pace. Twenty years have passed since the publication of the most recent Georgian glossary of aviation terms, and, obviously enough, following new notions, the period saw the emergence of new terms, most of them being adopted in

Georgian either without any translation or translated inadequately, as far as the process is entirely up to translators. Each translator adopts a term in his/her own way: either as a calque, that is, a loan translation, or without any translation when different transliteration conventions are applied.

Some years ago, Georgia joined the common European aviation area with its rigorous regulations and guidelines with documentations of various profiles from the European Aviation Safety Agency (EASA), normally provided in English. It is English that has become an official lingua franca for a number of industries and, of course, for aviation as well, its activities being of a very large-scale. Hence, it is necessary to establish adequate and coherent equivalents in Georgian for new technical and operational terms occurring in the documents. It was owing to the introduction of the new requirements that necessitated the compilation of an updated glossary of aviation terms.

In a long-term perspective, project-related studies will lay the foundations for Georgian aviation terms to gradually gain circulation at Georgia's aviation-related organizations, aviation education institutions, aviation-related designing and industrial enterprises, Georgian Civil Aviation Agency and its subordinate bodies, Georgia's international and local airports, and Georgian public at large.

The strength of a country's economy has been basically linked to aviation, one of the most important infrastructural branches. The branch comprises industry at large. Its development in Georgia began since the past century; however, the branch made a particular leap in our days, in the 21st century, and this is not surprising because the rapid speed of technological advancement requires all industries to keep up with the common trend.

The full-fledged operation of any industry, including aviation, has been essentially associated with scientific investigations for which the systematization and normalization of terminology are basic. Hence, a major aspect of a state language strategy is the standardization and normalization of terms, being tremendously significant for the usage of a language in its entirety. The creation of normalized, that is coordinated, scientifically elaborated terminology, adequate for Georgian, is basic for undertaking research and education activities in a coherent way (Muzashvili, 2014). Presently, a number of industries and fields found themselves facing new challenges. Following the collapse of the Soviet system, when independent post-Soviet states emerged, and Georgia too became a sovereign country, a natural pre-condition for the country's independence was to refine its own terminology. It is common knowledge that, in the Soviet period, terms were predominantly borrowed from Russian which was a lingua franca. The country's independence changed pathways of its development in a number of ways. Presently, Georgia communicates and collaborates with many countries; hence, collaboration primarily implies linguistic communication. The language of collaborative communication is English which has comprised the metalanguage of science and the terminological

system. This is the new challenge to be coped with by all the fields of science and, particularly, aviation, as far as this is a domain whereby the environment and communications, on which it rests, undergo more rapid changes. It was back in the past century when the terminology of aviation was concerned initially. In 1992, when the Aviation Education and Scientific Institute was established, it became a center which recruited faculty members, theoreticians of aviation and technology, and celebrated practitioners. Alongside the scholars' distinguished scientific and education activities, their terminological endeavors have been particularly significant. It was in 2002 when they compiled such a noteworthy oeuvre as *English-Russian-Georgian Explanatory Dictionary of Aviation*. It was the first glossary in the field with English terms, as far as there already was a need for the use of English. The development of aviation terminology was necessary for a better conduct of education and scientific activities; however, following the compilation of the glossary, a plenty of significant advances took place in aviation. That was why scholars of the Georgian Aviation University decided to compile *A Learner's English-Georgian Picture Glossary of Aviation Terms* and obtained funding. Aviation experts always jointly undertook both practical and theoretical activities associated with the coinage of terms. In the process of compiling the glossaries, they considered such key issues of terminology as synonymy and adaptation of foreign words (Muzashvili, 2015; Osadze, 2016).

The renowned Aviation Factory has designed and manufactured aircrafts for many years in Georgia; all paperwork was conducted only in Russian. After the proclamation of independence of Georgia, the factory was split into several entities of similar profiles but of distinct legal statuses, and it was necessary to keep records in the state language, that is, Georgian; its implementation faced certain linguistic problems owing to the lack of complete terminology of aviation. The development and improvement of the terminology of aviation is still of current interest. Besides, presently in Georgia, there are three international and several local airports whose operation is supervised by the Georgian Civil Aviation Agency. It is a member of the International Civil Aviation Organization (ICAO) and operates in accordance with its various guidelines composed in English. It is necessary to establish Georgian equivalents of novel technical and application terms used and occurring in these documents. In order to accomplish the goal, related theoretical aspects should be considered as well (Dateshidze & Osadze, 2014; Muzashvili, 2018; Dateshidze et al., 2023).

In Georgia, Georgian Aviation University is in need of the Georgian aviation terminology in its activities. Currently, the institutions make use of *English-Russian-Georgian Explanatory Dictionary of Aviation*, published in 2002, which need to be revised, updated and supplemented with new terms (Dateshidze & Osadze, 2014; Dateshidze & Osadze, 2016). Twenty years have passed since the publication of the first Georgian glossary of terms in the domain of aviation, and, for that period,

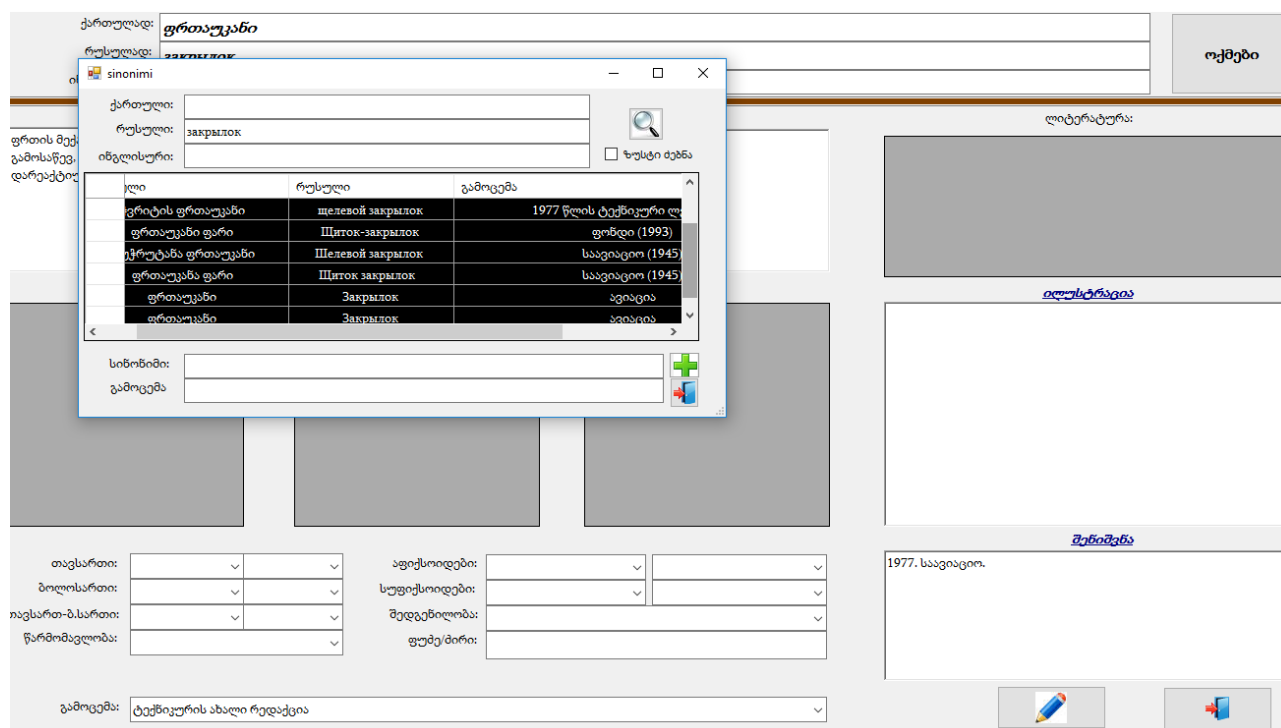
new notions and terms have obviously emerged in the industry of aviation, most of which, due to the lack an updated glossary of terms, are adopted in Georgian without any translation; moreover, they are adopted in various forms as far as the process in question, that is, adoption of terms, has recently been up to translators almost exclusively. Each translator adopts a term in his/her own way: either as a calque, that is, a loan translation, or without any translation when different transliteration conventions are applied. Naturally enough, it is necessary to establish precise equivalents of notions and terms. This endeavor requires planned, coordinated and joint work by domain experts and linguists. The project provides an excellent opportunity to achieve the goal. the problem in point can in no way to be solved only by means of such a glossary; however, publication of a well-coordinated picture glossary of established major terms will considerably promote advancement of the Georgian terminology of aviation and, in the future, compilation of a more comprehensive and complete glossary which will be well-ordered lexicographically to incorporate all the items currently evidenced in various glossaries and aviation documentation; each term will be labeled appropriately: **barbarism**, **historical synonym**, or **incorrect form**. Each of them will be referenced (*see*) to a normalized form. Alongside the elicitation and study of terminological diversity, the activities include to establish Georgian-English equivalences of terms and notions which is extremely important in order to compile an up-to-date glossary.

The planned, well-ordered and coordinated solution of the two important problems, in which aviation domain experts and terminologists take part jointly, is a significant step forward for the full-fledged improvement of the Georgian terminology of aviation. The project “A Learner’s English-Georgian Glossary of Aviation Terms” will also be favorable for a general public as far as the glossary will include basic terms used **not only** by domain experts but also occurring everywhere: dubbing films, fiction, translation, and colloquial speech. It should also be noted that entries will include illustrations.

The project applies the research methodology completely complying with the research aims and objectives that condition expected outcomes. It is noteworthy that research fellows of the Department of Bilingual Dictionaries and Scientific Terminology, Arnold Chikobava Institute of Linguistics, TSU, participate in the project; it also envisages to apply data of the major endeavor of the Department – the Georgian Term Bank having incorporated the data from the three formerly published glossaries of aviation. Based on such a foundation, it is easy to identify issues for discussion. Terminology work, coordinated with linguists, is not an unaccustomed activity for Georgian aviation circles; this is how the three Georgian glossaries of aviation were compiled. Recent years saw the emergence of a diversity of terms; several terms occur to refer to one and the same notion. This ought to be solved by all means. The problem has also been concerned by the Department of Bilingual

Dictionaries and Scientific Terminology, Arnold Chikobava Institute of Linguistics, TSU. Since 2014, the Institute has been engaged in developing a common terminological database accumulating Georgian paper glossaries of terms; alongside glossaries of other domains, the Georgian Term Bank has already incorporated the Georgian glossaries of aviation terms: *A Glossary of Aviation Terms*, compiled by the Terminology Commission of Tbilisi Technical College of Aviation, edited by V. Beridze. Tbilisi: Acad. N. Marr Institute, Tbilisi Technical College of Aviation, 1945; *English-Russian-Georgian Explanatory Dictionary of Aviation*. Arnold Chikobava Institute of Linguistics, Education and Scientific Institute of Aviation of Georgian Technical University. Tbilisi, 2002. Five editions of *A Glossary of Technical Terms* and paper glossaries of other domains, incorporated in the Term Bank, enable to have an easy and quick access to information about which terms refer to which notion, whether there is synonymy or there is a single equivalent in all the editions. Based on the Georgian Term Bank, the development of *A Georgian Glossary of Multi-domain Terms* has been initiated; the editing work is done according to thematic data. This research novelty enables us to make decisions more quickly and agree on a single equivalent term for a single notion. The thematic division of terminological data and their individual analyses is an excellent background for their overall study and scrutiny.

Fig. 1. Georgian Term Bank



As we see, the system presents several equivalents for a single term from various editions; they are: *Technical Terminology* of 1977, *Technical Terminology* of 1993 (this is an unpublished version compiled at the Institute of Linguistics), glossaries of aviation terms of 1945 and 2002. As the data

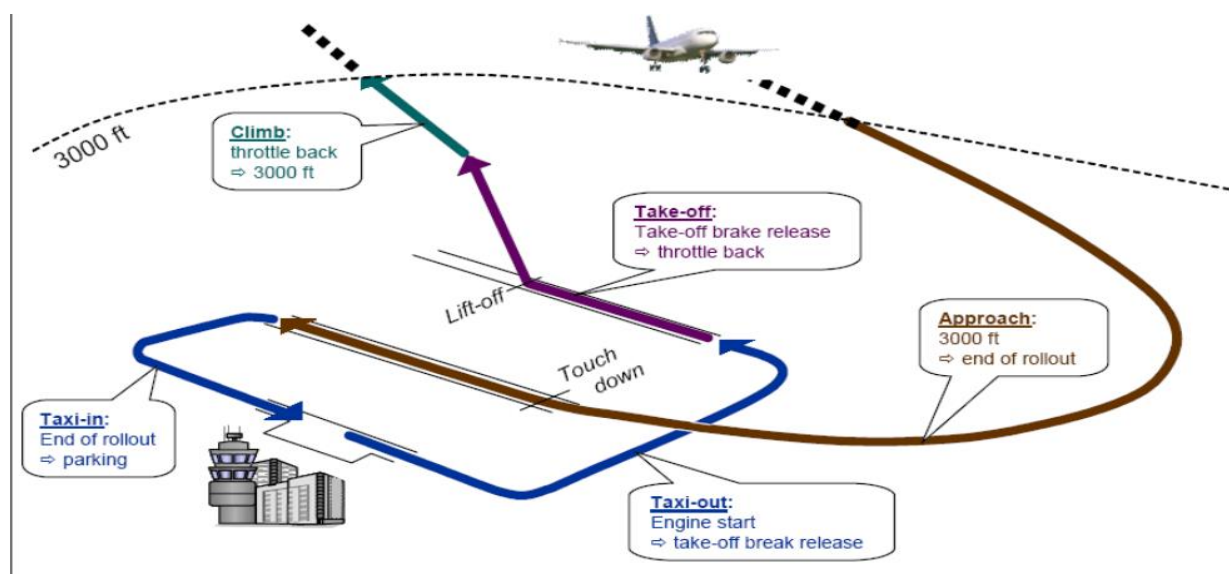
demonstrate, one glossary uses two different forms to refer to ‘a flap’: ფრთაუკანი /prtauk’ani/ and ფრთაუკანა /prtauk’ana/. It is clear that only one of the two forms should be chosen. Processing editorial data **is made easier** by **using the database** of the Term Bank, **makes it simpler** to check a term in all editions, and controversial issues are easily identified. Hence, in order to compile a glossary, we apply a familiar lexicographic, terminological method; we discuss terms and, in collaboration with linguists, establish their spelling and notional equivalences. In our activities, we consider European terminological know-how, terminological standards.

Outcomes of our research will be published in the web pages of the Georgian Term Bank developed by the Georgian Aviation University and Arnold Chikobava Institute of Linguistics. It **will become** available for common use in all kinds of documentation, textbooks, record keeping in Georgian as a state language.

The research outcomes will eliminate the current diversity of terms in the domain of aviation. Illustrations for the terms in the glossary will be used in teaching/learning processes at the Georgian Aviation University and other education institutions training would-be **pilots, engineers and other men in the field**, to enable them to master the appropriate Georgian terminology; besides, access to the aforementioned resource will facilitate protection, advancement and full-fledged use and promotion of the state language at aviation industry **enterprises** and airlines in Georgia.

One of the examples highlighting that the Georgian aviation terminology needs serious study and elaboration is a standard landing and take-off cycle (LTO - Landing and Take-off Cycle), developed and defined by ICAO in order to unify the landing and take-off process (below 3,000 feet, that is, 915 m, above ground level, and at ground level – on the airfield surface), comprising the following operations (see Figure 2):

Fig. 2. Standard landing and take-off cycle (LTO - Landing and Take-off Cycle)



Approach – movement of an aircraft in the air from entering the airport area till touching the runway; it lasts 4 minutes.

Taxi-in – movement of an aircraft from landing in the airfield till stopping; it lasts 26 minutes.

Taxi-out – movement of an aircraft with the main engines turned on between the terminal ground equipment to the assigned runway; it lasts 0.7 minutes.

Take-off – a phase of flight during which an aircraft goes through a transition from moving along the ground to flying in their air, usually from a runway.

Climb-out – a phase of flight during which an aircraft climbs to a predetermined altitude after take-off; it lasts 2.2 minutes.

Georgian equivalents of the aforementioned English terms are not presented in a complete way in English-Georgian and Russian-Georgian glossaries of aviation terms (Tepnadze et al., 2002). The situation is better in English-Russian glossaries of aviation (Dvali & Gambashidze, 1989).

Below we present a table featuring English, French and Russian terms for the operations included in a standard landing and take-off cycle; in addition, there are their Georgian equivalents gleaned from Georgian glossaries. As it is seen from the table, corresponding Georgian terms have to be established and adjusted. We also suggest Georgian equivalents of the terms.

Table 1. Terms for operations in an aircraft’s standard landing and take-off cycle

English	French	Russian	Dvali & Gambashidze, 1989	Tepnadze et al., 2002	Beriashvili, 2001	შემოთავაზება
Approach (4 min)	Approche	Заход на посадку	Заход на посадку	It occurs only in illustrations: (Fig. 115) - <i>აეროდრომთან მისასვლელი</i> ; (Fig. 117) - <i>დასაფრენად შემოსვლა</i>	<i>დასაფრენად შესვლა</i>	დასაფრენად შესვლა
Taxi-in (26 min)	Roulage	Руление после посадки	Руление, рулить /режим малого газа; заруливать (на стоянку)	It does not occur in the text; it occurs only in an illustration (Fig. 115): <i>Taxi portion - გასწორების მონაკვეთი</i>	<i>სვლა, მოძრაობა, მიმოსვლა*</i> ;	მიმოსვლა დაფრენის შემდეგ
“Taxi-out” or “Idle” (0.7 min)	Roulage	Руление перед взлетом	Руление, рулить /режим малого газа;	It does not occur in the text; it occurs only in an illustration (Fig. 115): <i>Taxi portion -</i>	<i>სვლა, მოძრაობა, მიმოსვლა*</i> ;	მიმოსვლა აფრენამდე

			выруливать (со стоянки)	გასწორების მონაკვეთი		
Take-off (0.7 min)	Decollege	Взлет	Взлет; отрыв от земли	In the text: ??აფრენა; in an illustration as well: (Fig. 122)-აფრენა	აფრენა	აფრენა
Climb-out (2.2 min)	Monte initiale	Набор высоты	Набор высоты, подъем	In the text: სწრაფადმავლობა; in the illustration: (Fig. 122) - სიმაღლის აღება.	სიმაღლის აღება	სიმაღლის აღება

Conclusion

As a result of the study, we established up to 1500 aviation technical terms which were aligned with the coherent illustrations, developed during the project, an electronic version of a glossary of aviation was designed, and its paper version (100 copies) will be published in late 2023. The copies of the glossary will be delivered to aviation-related organizations. Meanwhile, the Georgian Aviation University, as well as various organizations within the domain, will actively use the glossary in their academic activities, thus facilitating high-level training of would-be pilots by means of the coherent technical terminology and usage of adequate terms in practice.

Acknowledgment

This work was supported by Shota Rustaveli National Science Foundation of Georgia (SRNSFG) [SL-22-418].

Glossaries

Beriashvili, V. (2001). *Aviation Terminology (Russian-Georgian)*. Tbilisi.

Beridze, V. (ed.). (1945). *A Glossary of Aviation Terms*, compiled by the Terminology Commission of Tbilisi Technical College of Aviation. Tbilisi: Acad. N. Marr Institute, Tbilisi Technical College of Aviation.

Dvali, R. & Gambashidze, R. (eds.). (1977). *Technical Terminology: Russian-Georgian*. Tbilisi: Mecniereba.

Dvali, R. & Gambashidze, R. (eds.). (1982). *Technical Terminology: Georgian-Russian*. Tbilisi:

Mecniereba.

Dvali, R. & Gambashidze, R. (eds.). (1989). *Technical Terminology: Russian-Georgian*. Tbilisi: Mecniereba.

Nikoladze, G. & Nikoladze, N. (eds.). (1920). *A Russian-Georgian Technical Glossary (Vocabulary)*. Tbilisi: Technical Society of Georgia.

Nikoladze, G. & Nikoladze, N. (eds.). (1921). *A Georgian-Russian and Russian-Georgian Technical Glossary (Vocabulary)*. Tbilisi: Technical Society of Georgia.

Tepnadze, S., Betaneli, A., Tordia, P., Ebralidze, R., Metreveli, V., Gelashvili, L. (2002). *English-Russian-Georgian Explanatory Dictionary of Aviation*. Tbilisi: Arnold Chikobava Institute of Linguistics, Education and Scientific Institute of Aviation of Georgian Technical University.

References

Dateshidze, N., Muzashvili, N., Osadze, M. (2023). Structural Groups of Terms with Affixoids. *Terminology Issues* 5: 92-100.

Dateshidze, N., Osadze, M. (2014). On the Specification of the Terms with the Modifiers *šida* and *gare*. *Terminology Issues* 1: 87-92.

Dateshidze, N., Osadze, M. (2016). Semantic and Orthographic Analysis of Nomenclatural Denotations. *Terminology Issues* 2: 41-49.

Muzashvili, N. (2014). Terminological Word-Formation. *Issues of the Culture of the Georgian Word* 14: 128-132.

Muzashvili, N. (2015). On the Problem of Synonymy in Technical Terminology. *Issues of the Culture of the Georgian Word* 15: 61-66.

Muzashvili, N. (2018). On the Function of the Affixoids *c'ina-*, *c'inasc'ar-*. *Issues of the Culture of the Georgian Word* 18: 75-81.

Osadze, M. (2016). *The Process of Borrowing and Adaptation of Foreign Terms into the Georgian Language*. Tbilisi: Arn. Chikkobava Institute of Linguistics, TSU.