

РЕЗЮМЕ. Мақолада корпоратив ахборот алмашинуви режимида сервер мажмуасида ҳисоблаш юкламаларининг мувозанатлаш масалалари кўриб чиқилган. Корпоратив маълумотлар алмашинуви жараёнида сервер кластерлари юкламаларни тақсимлашнинг қарорларлар дарахтига асосланган усули илгари сурилди, бунинг натижасида юкламаларни баланслаш муаммоси ечилди.

РЕЗЮМЕ. В статье рассматриваются вопросы балансировки вычислительных нагрузок серверного комплекса в режиме корпоративного информационного обмена. Предложен метод распределения нагрузки кластера серверов в корпоративных процессах обмена данными на основе дерева решений, который решает проблему балансировки нагрузки.

SUMMARY. The article examines the issues of balancing computing loads of a server complex in the mode of corporate information exchange. In corporate data exchange processes, a decision tree-based method of server cluster load distribution was proposed, as a result of which the load balancing problem was solved.

THE IMPORTANCE OF THE ENGLISH IN ENGINEERING

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Tayanch soʻzlar: muhandislik, xizmat koʻrsatish, aloqa, hujjatlar, hamkorlik, Ingliz tilida taʼlim berish.

Ключевые слова: инжиниринг, обслуживание, коммуникация, документация, сотрудничество, обучение на английском языке.

Key words: engineering, serving, communication, documentation, collaboration, English-Medium Instruction (EMI).

Introduction. Engineering is a global profession that relies on collaboration, communication, and the sharing of knowledge across diverse cultures and regions. English has become the universal language in engineering, largely due to its dominance in scientific research, technical documentation, and international standards. Understanding and using English effectively is critical for engineers to access the latest technologies, comply with global regulations, and communicate effectively with colleagues worldwide. This paper explores the importance of the English language in engineering, emphasizing its role in education, technical communication, international collaboration, and research dissemination. The article covers topics such as helicopter-related issues, including how to control helicopters in various conditions. It can be recommended for aviation institute students who are willing to enhance their knowledge and skills using English literature.

Methods. As major methods it was chosen the methods of data collection and analysis techniques. For our propose we opted for several English based literatures and one-by-one analyzed them for understandability, wide coverage of given materials, graphics, tables, descriptions and others crucial factors. This study utilizes a qualitative approach by reviewing existing English-language engineering literature, including textbooks, technical manuals, academic research papers, and international standards. Sources from prominent organizations such as the Institute of Electrical and Electronics Engineers (IEEE), the International Organization for Standardization (ISO), and academic journals are analyzed.

Engineering education relies heavily on hands-on, practical experience. Simulation software and laboratory sessions are typically conducted in English, especially when using internationally developed tools.

English-Medium Instruction (EMI) Programs is most important issue in the education.

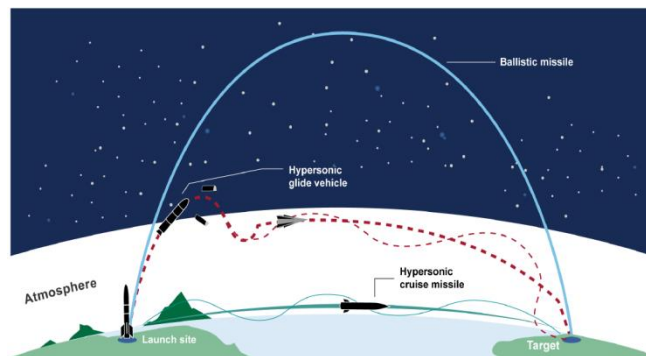


Figure 1. Ballistic missiles follow a largely predictable, arched trajectory, flying high above the atmosphere before plummeting back towards Earth. Hypersonic glide vehicles and cruise missiles fly at lower altitudes within the atmosphere and follow different flight paths. (Illustration by United States Government Accountability Office) [3].

Hypersonic missile technology has become a crucial aspect of modern defense systems, significantly impacting global security and aerospace advancements. These missiles, capable of traveling at speeds exceeding Mach 5, present new challenges and opportunities in aerodynamics, propulsion, and strategic defense planning. For students in aviation institutes, understanding hypersonic missile technology is essential, as it integrates key principles of aerospace engineering, materials science, and flight dynamics.

This study explores the significance of hypersonic missiles in today's geopolitical landscape, highlighting their influence on military aviation, air defense systems, and future technological developments. By analyzing the engineering principles behind these advanced weapons, students can enhance their knowledge of high-speed flight mechanics, thermal protection systems, and cutting-edge propulsion techniques. Additionally, familiarity with hypersonic technology prepares aviation students for careers in defense research, aerospace industries, and government agencies focused on national security.

Many universities and technical institutions worldwide offer English-Medium Instruction (EMI) programs for engineering. In these programs, all courses are taught in English, regardless of the native language of the country. This approach ensures that students develop both technical expertise and English language skills simultaneously.



Figure 2. Exercise extreme caution when hovering near buildings or other aircraft.

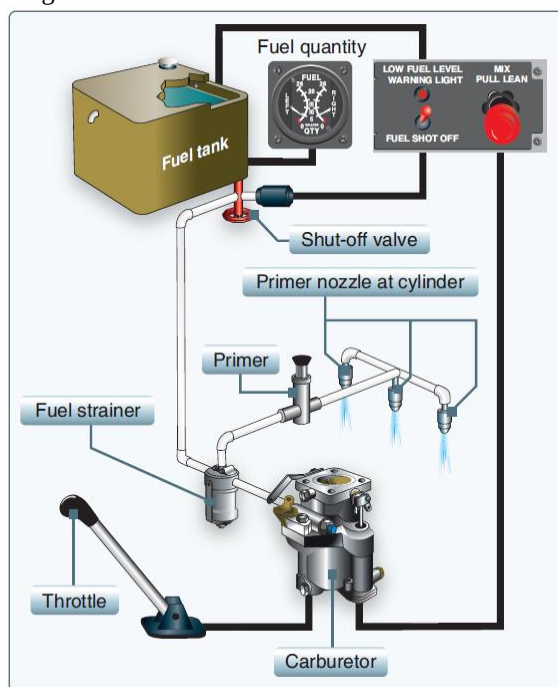


Figure 3. A typical gravity feed fuel system, in a helicopter with a reciprocating engine, contains the components shown here.

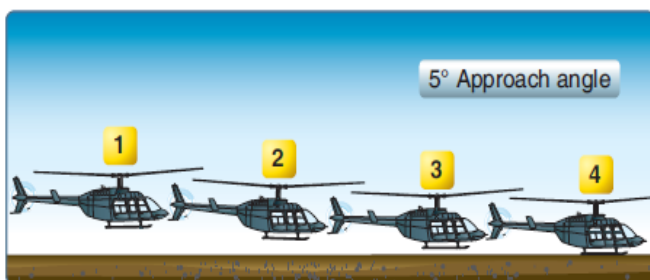


Figure 4. Shallow approach and running landing.

Use a shallow approach and running landing when a high density altitude, a high gross weight condition, or some combination thereof, is such that a normal or steep approach cannot be made because of insufficient power to hover.

Normal takeoff from the surface is used to move the helicopter from a position on the surface into effective translational lift and a normal climb using a minimum amount of power. If the surface is dusty or covered with loose snow, this technique provides the most favorable visibility conditions and reduces the possibility of debris being ingested by the engine [1].

Results.

Role of English in Engineering Education. The study found that English is the primary language of instruction in engineering programs across the globe, especially in regions where English is not the native language. Engineering universities in countries like Germany, Japan, Great Britain, and China offer English-based programs to attract international students and align with global standards.

English as the Medium for Technical Communication. The study demonstrated that English is the primary language for technical communication in engineering, including technical manuals, user guides, and safety protocols. Technical documentation from major engineering firms such as Siemens, Bosch, and General Electric is published primarily in English

Standardized Manuals and Documentation. English-based technical documents ensure that engineers worldwide have access to standardized information, allowing them to install, maintain, and repair equipment correctly. This standardization minimizes errors and enhances safety, as engineers across various countries use the same guidelines and terminology.

Software and Tools. Many engineering software programs, including AutoCAD, Proteus, MATLAB, and SolidWorks, NX CAD are available predominantly in English. This requires engineers to have a strong grasp of English to use these tools effectively, further emphasizing the language's significance in technical communication.

The study highlighted that English is the primary language for international collaboration among engineers. Multinational engineering projects, such as those in aerospace, civil engineering, and software development, rely on English as the common language for communication and documentation.

The findings confirm that the English language is integral to the engineering profession. English serves as the global medium for education, technical communication, collaboration, and research dissemination. Proficiency in English is not only beneficial but necessary for engineers to excel in their careers. Engineers with strong English skills have access to a wider range of educational resources, can participate in international projects, and are better positioned to publish research and contribute to the global engineering community.

Moreover, English proficiency allows engineers to use advanced software tools and understand technical documentation, which are crucial for maintaining safety and quality in engineering practices. The importance of English is particularly evident in multinational corporations where communication and collaboration across diverse

teams rely on a common language. Without a shared language like English, the engineering field would struggle with inconsistencies, miscommunication, and inefficiencies.

Conclusion. The English language is essential in the engineering field, providing a common platform for education, technical communication, international collaboration, and the dissemination of research. Engineers with proficiency in English are better equipped to access knowledge, participate in global projects, and contribute to technological advancement. As the engineering profession continues to expand and globalize, English will remain a vital tool for ensuring consistency, safety, and innovation. Encouraging English proficiency in engineering education and professional development is critical for preparing

engineers to succeed in an increasingly interconnected world.

Abbreviations

The list below provides a brief explanation of various abbreviations used in this paper.

- International Civil Aviation Organization (ICAO)
- National Transportation Safety Board (NTSB)
- Federal Aviation Administration (FAA)
- European Union Aviation Safety Agency (EASA)
- Air Traffic Controllers (ATC)
- Safety Management Systems (SMS)
- NTSB (The National Transportation Safety Board)
- ISO (International Organization for Standardization).

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РЕЗЮМЕ. Мақоллада Инглизча техник адабиётларининг авиациядаги аҳамияти, шу жумладан, ҳарбий учувчи тайyorlaydigan oliy harbiy yurtlari talabalariga, harbiy xizmatchilarni yetkazib beruvchi boshqa oliy harbiy yurtlari talabalari, uchuvchilar, muhandislar va tadqiqotchilarga bilimlarni chuqur o'zlashtirish va texnik qo'llanmalarni tushunishda yordam berish ta'kidlangan.

РЕЗЮМЕ. В статье подчеркивается важность англоязычной технической литературы в авиации, в том числе для оказания содействия студентам высших военных институтов, готовящих военных летчиков, курсантам других высших военных училищ, готовящих военных кадров, летчиков, инженеров, научных сотрудников в глубоком освоении знаний и понимании технической литературы.

SUMMARY. The article emphasizes the importance of English technical literature in aviation, including supporting students of higher military schools that train military pilots, students of other higher military schools that supply military personnel, pilots, engineers, and researchers to in-depth mastery of knowledge and understand technical manuals.

ORGANIKALIQ TÖGINLERDI LOKAL SALATUĞIN QURILMANIŇ DISKLI QARIQ ASHQISHTIŇ TIKKE SALISTIRĞANDA ORNATILIW MUYESHINIŇ OLARDIŇ JUMIS KÖRSETKISHLERINE TÁSIRI

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Qaraqalpaqstan awıl xojalıǵı hám agrotexnologiyalar institutı

Tayanch so'zlar: laboratoriya qurilmasi, nazariy tadqiqotlar, agregat, disk, omillar, egat ochgich, o'rnatiladigan burchak, sinovlar, harakat tezligi, agroteknika talablar, tadqiqot natijalari.

Ключевые слова: лабораторное оборудование, теоретические исследования, агрегат, диск, факторы, бороздarez, установленный угол, исследование, скорость движения, агротехнические требования, результаты исследований.

Key words: laboratory equipment, theoretical studies, the aggregate, the disc, the factors, the borehole cutter, the fixed angle, the study, the speed of movement, the agrotechnical requirements, the results of the studies.

Kirisiw. Ötkerilgen teoriyalıq izertlewler nátiyjelerinen kelip shıǵıp, organikalıq tóginlerdi lokal salatıǵın qurılmanıń diskli qarıq jarǵıshınıń tikke salıstırǵanda ornatılıw múyeshiniń olardıń jumıs kórsetkishlerine tásirin anıqlaw maqsetinde eksperimental izertlewler alıp barıldı.

Izertlew metodikası. Eksperimental izertlewlerdi ótkeriw sharayatlardı hám usılları. Eksperimental izertlewler Özbekstan awıl xojalıǵın mexanizaciyalastırıw ilimiy-izertlew institutınıń tájiriye xojalıǵı atızlarında shúdigarlaw, chizellew, baronalaw hám malalaw jumısları alıp barılǵannan keyin eki basqısha ótkerildi, yaǵnıy dáslep bir faktorlı, keyin bolsa kóp faktorlı tájiriyeberler ótkerildi. Tájiriyeberler ótkerilgen atızlardıń topıraǵı orta-salmaqlı

mexanikalıq quramdaǵı boz topıraq bolıp, jer astı suwı 10-12 m tereńlikte jaylasqan [1; 2].

Tiykargı bólim. Tájiriyeberlerdi ótkeriw ushın arnawlı laboratoriya qurılması tayarlandı. Ol aspalı apparatı menen úskenelengen rama, oǵan ornatılǵan tayanış dóńgelekler hám qarıq jarǵıshlardan quralǵan (1-súwret).

Laboratoriyalıq qurılma qarıq jarǵıshlar arasındadı keske hám boylama aralıqlardı ózgertiw múmkinshiligine iye etip tayarlangan. Aldın ótkerilgen salıstırıw sınaqları nátiyjelerinen kelip shıǵıp, qurılmaǵa organikalıq tóginler salınatıǵın qarıqlar ashatuǵın diskli qarıq ashqıshlar hám tógin salınǵan qarıqlardı kómiw menen bir waqıtta egiw hám suwǵarıw qarıǵın ashıw ushın awdarǵıshlı qarıq ashqıshları tańlap alındı.