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FOREIGN TECHNOLOGY DIVISION

TO GROW WINGS IN THEIR YOUTH

by

Yu. Zel'venskiy

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EDITED TRANSLATION

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TRANSLATION DIVISION
FOREIGN TECHNOLOGY DIVISION
WF-afb, ohio.

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U. S. BOARD ON GEOGRAPHIC NAMES TRANSLITERATION SYSTEM

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*Ye initially, after vowels, and after ꞉, ꞉; ꞉ elsewhere. When written as ꞉ in Russian, transliterate as ye or ë.*

RUSSIAN AND ENGLISH TRIGONOMETRIC FUNCTIONS

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Russian English

rot     | curl   |
lg      | log    |

GRAPHICS DISCLAIMER

All figures, graphics, tables, equations, etc. merged into this translation were extracted from the best quality copy available.
In its decision, the 25th Congress of the All-Union Leninist Communist Youth League stressed the primary significance of the military-patriotic indoctrination of the youth. To indoctrinate the rising generation in the revolutionary and combat traditions of the Soviet people and the Communist Party, to raise patriots who are boundlessly devoted to the Motherland and ready for its defense - this is one of the most important tasks. In its solution, an ever increasing role is played by various military-patriotic organizations of teenagers. Schools and clubs of young cosmonauts, pilots, seamen, detachments of border guards and friends of the Soviet Army, school museums, and rooms of combat glory have also received mass propagation everywhere in recent years.

A new stimulus to the further development of these important and useful forms of work was provided by the All-Union Conference on Military-Patriotic Indoctrination and Practice of the Activity of Schools of Young Cosmonauts and Pilots which was conducted by the Komsomol Central Committee jointly with the Main Political Directorate of the Soviet Army and Navy, the political directorate of Civil Aviation, and the DOSAAF [Voluntary Society for Collaboration with the Army, Air Force, and Navy] Central Committee. It was conducted in Orenburg and the basis of discussion was the three-year experience of the oldest school of young cosmonauts. The conference showed the tremendous skills and how varied are the forms which were adopted by the military-patriotic out-of-school organization of teenagers.
As you see, only those which unite young romantics of the blue heights were discussed.

We publish below materials on the experience of the Orenburg school of young cosmonauts and the results of the All-Union Conference which was conducted by the Komsomol Central Committee.

Launch Pad

There is joyous excitement in one of the Orenburg schools. The youngsters from the younger classes transmit to one another with delight:

"Now the cosmonauts are coming to see us!"

And then several erect youths in an unusual uniform appear on the broad staircase. Dark-blue jackets with shining buttons and shoulder boards edged with light blue sit well on them. Flying emblems are brilliantly distinguished on their berets. The youngsters surround the guests in a solid ring and look at them without tearing away their enraptured gazes. A most desperate second-classman tugged at the sleeve of the nearest "cosmonaut" and asked quietly:

"Tell me, are you Titov?"

"No, I am Karpov."

The boy was clearly confused: "But I never heard of such a cosmonaut..."

But then, the person he was talking with in no way becomes flustered: "It is nothing, while you are growing up you may also hear of me."

This tiny episode which occurred during one of the numerous meetings of pioneer detachments with the students of the school of young cosmonauts is not simply a cheerful misunderstanding. It has
a fully serious meaning: these lads in the blue jackets have set a large goal for themselves, are moving toward it persistently, and are confident that they will reach it.

The school of young cosmonauts imeni Yu. A. Gagarin with the Orenburg Higher Military Aviation School of Pilots is the firstling of youth organizations of this type. Created three years ago on the initiative of the oblast Komsomol committee and the command of the school on the voluntary service principle, it has accumulated substantial organizational and methodological experience and won great popularity not only in the city and oblast, but also on the scale of the entire country. The school has already graduated its pupils twice. Many graduates are now training successfully in flying and other military schools.

Here is one of them - Junior Sergeant Vyacheslav Gerasimenko, an officer candidate of the Orenburg school. He has been attracted by aviation from his earliest years, was occupied in the aviation modeling laboratory of the oblast station of young technicians, and read much about airplanes and pilots. Learning of the creation of the school for young cosmonauts, he immediately submitted his application and was its zealous pupil, activist, and secretary of the unofficial Komsomol organization.

"The youth school became a launch pad to the expanses of the fifth ocean for me and my comrades," says Slava. "In it, we understood what the profession of a pilot is and how much must be known and how much we should be able to do before we rise into the sky in an airplane. Usually we arrive long before the start of the lessons. We wanted to examine the airplane attentively and sit in the cockpit. With enthusiasm we became acquainted with the principles of aerodynamics, aerial navigation, and the design of the jet engine. I will never forget the exciting minutes of the solemn oath of young cosmonauts and the awarding of the name of Yu. A. Gagarin to the school. And how much of interest we learned on lessons on political training and at meetings with old communists and hero-pilots.
"From my own experience and from the example of my comrades I see how much the completion of the school of young cosmonauts or the DOSAAF aero clubs provides for successful training in the school. And I want to thank with all my heart those who brought us to the threshold of great aviation."

In formation - young cosmonauts of Orenburg.

Actually, all of the school's successes are primarily the result of the fruitful work of public-spirited enthusiasts. It is impossible to calculate how much time, work, energy, and inexhaustible love for flying and our youth are contributed to the indoctrination of the youths by the chief of the school, Hero of the Soviet Union and Lieutenant Colonel (retired) Vasily Vladimirovich Klimov. He, a famous fighter pilot who shot down 27 fascist airplanes, has something to tell the youngsters. In listening to him, the youngsters seem to be participants in the heroic traditions of the Soviet pilots and feel themselves to be their heirs and continuers.

Much effort is given to organizational and indoctrinational work by aviation veterans Colonels (retired) I. Zubov, N. Maruyev, and A. Seregin. They maintain close ties with the parents of the young cosmonauts and with the teaching collectives of the general educational
schools in which they are studying. It is not necessary to be an expert to enter the school of the youths. But the regulation provides: "Poor progress in the secondary school is incompatible with further instruction in the school of YuK [young cosmonauts]." Satisfaction of this requirement is monitored systematically. As a rule, the progress of the young cosmonauts is increased and there is no point in talking about discipline. The directors of the Orenburg school unanimously note their smart appearance, ability to not waste time, and increased social activity.

The basic obligations of the young cosmonaut are concentrated in the Oath. Its text is short and expressive:

"I, a student of the school of young cosmonauts, take the oath and solemnly swear to be honest, disciplined, protect military and state secrets strictly, and accomplish the Regulation and instructions of the school's command.

"I pledge to study only with grades of good and excellent, participate actively in social life, accomplish the requirements of the moral code of the builder of communism, and with all my deeds to justify the lofty title of young cosmonaut - the successor to the remarkable traditions of the heroic conquerors of the Universe who were raised by our great Motherland.

"I pledge to prepare myself daily for work and for the defense of our socialist Motherland, to care for state and people's property, and to be boundlessly devoted to my people, the Motherland, and the Soviet government.

The school's two-year program is intended for 340 training hours. Of them 30 hours are allotted to political and 60 to physical training. The remaining hours are distributed to familiarity with the aviation equipment, theory of the flight of flight vehicles, radio service, and so forth. The lessons take place twice a week. They are conducted by the teachers of the Orenburg school A. Pashkovskiy, O. Shlyapintokh, L. Adamovich, A. Kudryavtsev, and others.
We once had the occasion to attend some lessons.

The young communists in uniform formed up on the parade ground. The detachment leaders report clearly to the chief of the school's training unit:

"Comrade Colonel, the first detachment of young cosmonauts consisting of 28 men is assembled for the conduct of lesson!"

A. I. Seregin recalls the agenda for the day and then reports news which has been received to youngsters. Yuriy Alekseyevich Gagarin, whose name the school bears, has sent a science-fiction book which has just been published. In the dedicatory inscription the first cosmonaut expresses his confidence that the youths who today are standing on the threshold of the fifth ocean will be able to realize their boldest fantasies. Since the time when Yu. Gagarin visited his young successors last August, a close tie has been maintained between them.

The detachments disperse for lessons. Today the older ones have drill in the low-pressure chamber. Putting on the interphone headsets, in turn they "gain altitude." Tenth-class pupil of school 22 Leonid Balyasinskiy, turner (he concluded night school) Viktor Kudashev,
and their comrades experienced new, unknown sensations. Colonel of Medical Service Viktor Aleksandrovich Korchagin follows the behavior of the youths in the low-pressure chamber.

Another detachment is occupied with physical training. On sports equipment, under the direction of the experienced teacher communist Viktor Stepanovich Lobanov the youngsters train their vestibular apparatus, and they develop strength, dexterity, and endurance.

The young cosmonauts especially strengthen and harden themselves in the summer, in the period of camp assemblies. Last year, they were in camp from 1 July through 1 August. This was not simply rest. Each morning 70 fellows took off for the "Ovoshchevod" suburban sovkhoz. They worked on weeding vegetables for four hours. Then, two hours of training lessons. The remaining time was allotted for rest and military sports games. During the month the youngsters put on weight well, matured, and grew up.

And here are small economic calculations. The students earned 3270 rubles for their work in the sovkhoz. They spent 2800 rubles for food. With the remaining 470 rubles a trip to the Orsk DOSAAF aviation sports club was organized to accomplish parachute jumps. Thirty-six young cosmonauts accomplished three jumps each. They were awarded a third-class rating for parachute sport. The youngsters also accomplished familiarity flights on the An-2 airplane, occupying the copilot's seat in turn.

In the struggle for high progress and exemplary discipline, in all political-indoctrinational work the command of the school relies on the unofficial Komsomol organization which has been established here. By decision of the bureau of the Orenburg Komsomol city committee, Yu. A. Gagarin has been placed on its roster as an honorary member of the city Komsomol organization. Sessions of the bureau and Komsomol meetings are conducted regularly and a wall newspaper, "To the Stars," and combat leaflets are published.
The Orenburg school of new cosmonauts did not remain the only one for long. Following its example, satellite schools also arose with other military aviation schools. Following its example, but not in its image. Those who try to copy the organization, program, procedure, and even the uniform of the Orenburgites exactly without considering local features often encountered serious difficulties. The necessity for a dialectical approach was completely manifested — proceeding from the place, time, and conditions. Even greater questions arose when the schools, clubs, and detachments of young cosmonauts and pilots received broad dissemination with the groups, detachments, and airports of the Civil Air Fleet, with aviation training and sports organizations of DOSAAF, and with stations of young technicians, palaces and houses of pioneers, and even with house management committees.

Are a common Statute, program, and Regulations needed? Where can premises and textbooks be obtained? Can we limit ourselves to the students of the two senior classes alone? And how about seventh and eighth classmen who dream of cosmodromes and take off areas?

The All-Union Conference on Military-Patriotic Indoctrination of the Youth and the Work Practice of Schools of Young Cosmonauts and Pilots provided the answers to these and many other questions.

There is the unanimous opinion that the main goal of the school of young cosmonauts and pilots is not training aviation specialists, but the military-patriotic indoctrination of teenagers. The Soviet state and the Communist Party are not at all indifferent as to who the younger generation selects as its heroes. The Nikolay Gastello's and Aleksandr Matrosov's, Zoya Kosmodem'myanskaya's, and Aleksandr Pokryshkins, and millions of heroes — fighting men and builders — grew from the boys and girls who played Budennyy and Chapayev, Chkalov and the female machine gunner Anka. It is wonderful that the youngsters are now using the conquerors of space, commanders of supersonic rocket carriers — people who are boundlessly devoted to the Motherland, skillful, brave, and valiant — as their heroes. The youth schools are disclosing for the teenagers models of Soviet heroes
of the past and present and stimulating the striving to become like them and imitate them.

It is very important to help young boys and girls to determine their path in life, to learn about, select, and love their future profession. The youth schools acquaint their alumni with a range of sciences which the pilot requires, develop the striving to get acquainted with them, and develop the foundations for such qualities as being accustomed to discipline, industriousness, boldness, endurance, and the ability to treasure and not waste time. Here training distracts the teenagers from empty whiling-away of their time, from unwholesome enthusiasms, and it even rectifies the behavior of those who are customarily called "difficult."

And even if all those who today wear the emblem of the young cosmonaut or pilot do not subsequently become commanders of rocket carriers, pilots of airliners, aviation engineers, or even more, cosmonauts. The time spent in the youth school is not spent in vain. The good seeds which are sown in it will certainly provide shoots and will help to raise worthy citizens of our state and useful and active members of a socialist society. It will be a genuine take off area into a great, interesting, and purposeful life.

Proceeding from this, many participants in the conference spoke in favor of expanding the circle of teenagers who are accepted in the satellite schools. The discussion concerned girls first of all. An example can be provided by the school of young cosmonauts with the Orsk DOSAAF aviation-sports club. Created first following the example of the Orenburg school, it then underwent a number of changes which followed from local conditions. In the last recruitment, of 60 students 12 were girls. And, as the director of the school asserts, things went even better. The girls worked well and serve as an example in many ways. The fellows pulled themselves together - they did not want to lag behind the girls, and discipline improved. By the way, here all young cosmonauts are members of the aviation sports club and its glider and parachute sections. There are also girls in the satellite school with the Syzran' aviation school.
In Orenburg, Volgograd, and a number of other cities they are succeeding in accepting no more than one tenth of the applicants in the satellite schools. In which regard, only youngsters who have finished the 9th grade. And what can be done with the remaining nine-tenths? For they are passionately interested in aviation and mastery of space and they dream of the sky.

A successful solution to this problem was found in the Komi ASSR where the "Raketa" club of young fliers has already been operating for three years. Conceived on the initiative of the Komsomol organization of the Syktyvkar aviation group of the GVF [Civil Aviation Fleet] as a city club, it quickly assumed republic scales. Now the "Raketa" club has about 60 branches in cities and rayons. More than 1200 school children of the fifth, sixth, and seventh grades are occupied in them. Half the club members are girls. A detailed story about "Raketa" is the subject for a special article. It is only necessary to note that here many interesting forms of work which are attractive and which correspond to the youngsters' romanticism are employed.

And this is very important. The most serious organization of the matter in the youth schools not only does not exclude but, on the contrary, presumes forms of indoctrinational influence which are specific and inherent in a certain age. It is not by chance that among the school children, including the senior classmen, such popularity is enjoyed by trips, rallies, camp assemblies, and all types of competitions where one can struggle and win. The banner, the uniform, the formation, the oath - these cause delight in the hearts of the teenagers. All this still has elements of a game for them in considerable measure, but an interesting game which is called upon to prepare them for a deeper perception of the principles of military service.

A completely well-founded fear was expressed at the conference - how not to "organize" the youth schools excessively, and not to restrict them within too rigid a framework. General regularities and general foundations for the activity of such schools are needed,
but each of them has the right to independence, creativity, and initiative. Firm unification here is counter-indicated. The conference approached the development of the Statute on youth military-patriotic schools namely from these postions. In the very heading of this document it is stressed that the Statute is a model. Being guided by it, the council of each school organizes its educational-indoctrinal work on the basis of local conditions and the specific features of the military schools, the DOSAAF aviation training and sports organizations, GVF detachments and airports, and so forth.

The goal of such schools remains steady regardless of the organizations with which they are created - the communist indoctrination of young boys and girls in a spirit of boundless devotion to the Motherland, the Communist Party, and the Soviet government and a readiness to defend their Fatherland with weapon in hand.

Of course, one conference could not discuss and, even more, solve all the problems connected with the military-patriotic indoctrination of the school youth. It permitted generalizing and analyzing the accumulated experience and provided a new impetus for a further development of schools, clubs, and detachments of young cosmonauts and fliers and of all good and different forms of work with the coming generation.

Leonid Balyasinskiy and Viktor Kudashev on lessons.
Alumni of the Orenburg and Orsk schools for young cosmonauts, now officer candidates of the Orenburg school (from left to right): Anatoliy Poyarkov, Viktor Abakumov, Anatoliy Zhigalin, Vyacheslav Gerasimenko, Aleksey Ivanov, Oleg Popov, and Gennadiy Sokolov.
END

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