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USSR REPORT  
MILITARY AFFAIRS

No. 1683

AVIATSIYA I KOSMONAVTIKA

No. 10, October 1981

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AIR FORCES

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On the Cover

Outside front--Communist Military Pilot 1st Class Major D. Kokhanovskiy rewarded by the command for boldness and decisive actions in a complex aerial situation. Photograph by A. Semelyak.

Inside front--Combat training is underway. Photo by A. Semelyak.

Inside back--Winged youth. Photograph by S. Prokhorov.

Outside back--In the landing area of an assault landing force. Photograph by A. Semelyak.

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## AIR FORCES

MAR AVN G. SKORIKOV ON TRAINING AND COMBAT READINESS

Moscow AVIATSIYA I KOSMONAVTIKA in Russian No 10, Oct 81 pp 1-3

[Article by Mar Avn G. Skorikov, chief, Air Force Main Staff, Air Force First Deputy Commander in Chief: "In the Interests of Combat Readiness"]

[Text] The summer training period is coming to an end in air force units and sub-units. The command, staffs, political organs and party and Komsomol organizations are preparing to summarize the results of the work and the socialist competition for the year. Careful and objective analysis will show who achieved what sort of results and what the causes of the successes or failures were, and it will help us work out the right direction for the future.

The training year is coming to an end, but the intensity of flying and the keenness of competition are not declining. In the classrooms and at the airfields, in the flight training zones and at the practice ranges, air warriors are continuing to improve their combat proficiency, performing exercises required by the combat training plan and concentrating their efforts on the main task--all-out improvement of the combat readiness and fighting efficiency of the subunits and units and watchful protection of the fatherland's peaceful sky.

"Today the situation in the world demands new, additional efforts in order to eliminate the threat of war and reinforce international security," it was said at the 26th Congress of the Communist Party of the Soviet Union. The international situation is complex and explosive. The tension in some regions of the planet attests to the fact that adventurism and a readiness to cast the world into the abyss of thermo-nuclear disaster are manifesting themselves more and more evidently in the foreign policy of the governments of the leading capitalist states. Militarists are not heeding the voice of reason, they are intensifying the arms race, and they are making active preparations for political and military actions against socialists and developing countries.

"Our party and its Leninist Central Committee are making the necessary conclusions from the complex international situation," notes CPSU Central Committee Politburo Member, USSR Minister of Defense, Marshal of the Soviet Union, D. F. Ustinov. "Performing great creative tasks, they are not ignoring the problems of strengthening the country's defense capabilities, not even for a single day. This is what the great Lenin taught us to do. This is what the experience of history teaches us to do."

The history of Soviet aviation and the glorious pages of its chronicle are tied in with the defense of Great October and with strengthening the Soviet Union's defensive might. The great Lenin, who wisely foresaw the important role aviation was to play in defense of the socialist state, stood by its cradle.

Developing and improving, the air force has become a powerful and the most mobile branch of the armed forces. During the Great Patriotic War it successfully completed the missions of attaining air supremacy, covering the troops and providing air support to them in defense and offense, performing air reconnaissance, making powerful strikes against objectives in the enemy rear and at tactical and operational depths, providing communication with partisans and performing other assignments. The war gave birth to a mass of entirely new concepts in air tactics, and it enriched the theory and practice of operational and strategic use of aviation. Air counterpreparation and the air offensive, use of air formations in behalf of frontal mobile groups, air operations and engagements, encirclement operations and others were developed by Soviet air commanders and effectively used in battles against the fascist invaders. Soviet military science gained highly valuable experience which is still significant today. Its deep analysis, its thorough study with a consideration for existing weapon systems and its use in combat training have tremendous significance to improving the military and special knowledge of the airmen and to successful completion of the missions facing the air force. This experience helps formation, unit and subunit commanders teach their subordinates what they need in war.

The present stage of development of the air force is typified by extensive utilization of the achievements of scientific-technical progress. The air force possesses fabulous craft of all classes and types, outfitted with powerful armament capable of hitting targets in any conditions and at various altitudes and ranges. Our aviation owes all of this to the untiring concern of the party and government for constantly upgrading the quality of aviation equipment and weapons to be used for the fatherland's protection.

The statement in the Accountability Report of the CPSU Central Committee to the 26th CPSU Congress that Soviet science and the economy are capable of supporting creation of modern weapons in response to the intrigues of the imperialist camp and its attempt to achieve military-technical superiority over the Soviet Union was heard throughout the world. But the foundation of our state's foreign policy has always been and will continue to be peace, protecting the peaceful labor of the Soviet people.

Experience shows that development of military equipment and weapons has had a decisive influence not only on tactics and on the ways in which this equipment is used in combat, but also on the methods used to train personnel in technical, combat and moral-psychological aspects. This means that omissions, mistakes, inadequate training and unpreparedness may become causes of mission failure. Equipment is placed into motion by man, by a soldier, by a specialist with all personal features inherent to him. In this connection it is no accident that our commanders, political workers, staff officers and active party and Komsomol members are devoting priority attention to the moral-political and psychological toughening of the personnel and to formation of a communist philosophy and high combat qualities in the soldiers.

Political officers V. Bartov, V. Volyntsev, V. Perepelitsa, V. Korniyenko and V. Khmelevskiy maintain an attitude of high party responsibility toward the indoctrination of highly ideological, morally steadfast and professionally competent air warriors. Their purposeful activities aimed at unifying the military collective and nurturing the best human, party and combat qualities in their subordinates are having a positive effect on the results of the airmen's military labor and their effective completion of missions in the complex conditions of modern combat.

As we know, successful completion of the tasks of combat and political training and maintenance of firm military discipline and constant combat readiness depend on the ability of commanders and staff to manage the activities of all services and subunits. A mandatory prerequisite of this is thoughtful planning of the organization, conduct and support of flying, high quality flight control and objective analysis and evaluation of the results of combat training.

Being the organizing and controlling organ, the staff is called upon to actively influence the entire course of combat training. Planning and control are two inseparable aspects of its activity aimed at one important goal--maintaining the combat readiness of the subunit at the required level. Staff efforts aimed at planning combat training are acquiring especially important significance in the present stage. By analyzing successes and shortcomings of combat training in previous years and the conditions and situations in which it proceeded, and by considering the requirements of the higher command for the forthcoming period, we can predict the course of training in stages, make adjustments and correct mistakes in time and predict a highly probable end result on a scientific basis.

As we know, one of the responsibilities of the staff is to collect and process information. The staff of air units is represented by executives from different services. And without a doubt up-to-date and complete information on all aspects of the work has a decisive influence on the commander's adoption of the correct decisions and their efficient implementation. Here are a few examples.

Engineer-Major V. Stepanenko competently manages the air engineer service of a helicopter unit. He has an engineer's deep knowledge of aviation equipment and of the procedures used in its preparation and repair, he is exacting toward himself and his subordinates, and he constantly improves the methods he uses to train his technicians. The unit's helicopters are always in combat readiness, and business-like, creative contact has been established between the pilots and air specialists. It is no accident that when the squadron was ordered to fly to another airfield during a tactical flight exercise, all crews completed this mission quickly and precisely.

The fighter pilots completed the technical flight exercise with high quality. The staff of the unit in which Lieutenant Colonel V. Prilipukhin is the chief of staff developed an instructive aerial situation and conditions for flying assignments, and it made plans for servicing the equipment and supporting flying at the other airfield. It also considered the safety measures. The crews, meanwhile, confidently hit all of their airborne targets in time.

Efficient, continuous and dependable control is an important prerequisite of fulfillment of the plan for airman combat training. Experienced commanders clearly

understand that this means not only organization and management of flying but also continuous, deep analytical work by commanders, by staff and combat control officers and by political workers aimed at training and indoctrinating the personnel, and firm leadership of the units and subunits in the course of daily training and in all combat activity, based on deep knowledge of the situation, on one's own possibilities and on the enemy's intentions. Operational-technical training of commanders, improvement of the organization of the training process and flexible control play a decisive role in this connection.

This is all well understood in the unit in which Lieutenant Colonel A. Vakulenko is the commander and Major V. Nikulin is the chief of staff. The collective follows the order of the day strictly, and it uses the training base with maximum effectiveness. This makes it possible to constantly improve the occupational proficiency of flight crews, engineers and technicians. The commander and the chief of staff devote special attention to developing their subordinates' habits of correctly evaluating the evolving situation and their ability to efficiently prepare data required for decisions on combat activities, no matter what the situation. However, no matter how sophisticated the computer helping staff officers to complete their calculations might be, it does not take the moral-psychological state of the airmen into consideration, which is why only the commander can make the decision for combat. He also bears the entire responsibility for the results of the actions he plans. While in previous wars the mistakes that were made in preparing for and conducting operations could be corrected in one way or another, this is practically impossible given today's weapons. The commander and the chief of staff never forget this when they play out the typical situations of aerial combat, practice the maneuvers performed to protect the subunits from attack and analyze and select optimal solutions providing maximum results at a minimum outlay of forces and resources. Considering that the time factor plays the decisive role in the present stage of weapons development, they teach their subordinates to work against the clock and to reduce the time required to make the subunits combat ready, and they help them in their purposeful search for the most effective forms and methods of professional improvement. The most important things in this work are strict planning, highly effective use of every hour of training time and improvement of the quality of work done on aviation equipment.

Modern airplanes and helicopters can fly great distances in a broad range of altitudes and speeds. High mobility, the capability for quickly escalating efforts in decisive sectors, the possibilities for extensive maneuver and presence of powerful armament allow the crews and subunits to complete missions of various scales both independently and in coordination with other arms and services. The crews of modern air weapon systems can operate in all conditions day and night and at maximum and minimum altitudes, they can destroy the enemy's attack resources, they can provide support to the troops, they can successfully fight for air supremacy, they can perform air reconnaissance and they can land troops and cargo. Thus the success of combat activities depends today entirely on how well coordination between aviation and the troops in behalf of which it operates is organized.

Tactical flight and all-arms exercises serve as a school of operational-tactical and combat proficiency. In them, commanders, staff officers and political workers get an impression of the nature of modern combat, and they learn to efficiently

control subunits and units, organize operational and tactical coordination and distribute efforts in relation to missions, place and time. As a rule, during preparations for an exercise specific missions are announced to ground and air subunits. During this time the officers study the situation, they determine the time, order and signals of interaction and they predict the possible variants and results of combat. Combined-arms and air commanders state their opinions on specific issues, and the exercise leader selects the most sensible plan of combat operations. It would be pertinent to note that the best commanders look at the entire course of combat activities in stages, from start of preparations for an operation, to its conclusion. They devote a great deal of attention to improving control over combat and communication, and they make plans for efficient information exchange. Working in an intense rhythm in conditions as close as possible to those of real combat, pilots, navigators, engineers and technicians learn to act as they would in war. The crews of top-class military pilots officers P. Bredikhin, V. Sivak, A. Bankovskiy, M. Gunenko and others have flown long flights several times in complex aerial and weather situations. They reached their targets and subjected them to annihilatory attack right on schedule. This is a result of a great meticulous effort to nurture moral-psychological steadfastness and flying proficiency.

CPSU Central Committee Politburo Member, USSR Minister of Defense, Marshal of the Soviet Union D. F. Ustinov emphasized in particular: "All branches of the armed forces are developing in harmony. They are outfitted with the most up-to-date weapons. But no matter how powerful their armament may be, the decisive force in the army and navy is the Soviet soldier--ideologically convinced, politically mature, proficient with the weapons and combat equipment entrusted to him."

Development of ideologically toughened, steadfast and competent air warriors capable of winning over a strong and well equipped enemy is the main task of political indoctrination and organizational work done by commanders, staffs, political organs and party and Komsomol organizations. Our party demands that we direct all of the resources of ideological influence at nurturing communist convictions, a sense of Soviet patriotism and socialist internationalism, pride for the motherland and a preparedness to courageously defend the achievements of socialism in the soldier.

The results of this year's combat training show that the air force personnel are honorably justifying the high evaluation given to the labor of Soviet soldiers by the 26th CPSU Congress. The military airmen deeply understand the importance of their important missions, and they spare neither effort nor time to complete them successfully. The number of masters of combat, military sniper pilots and sniper navigators is constantly growing in the units and subunits. Many of them have earned the great "USSR Distinguished Military Pilot" and "USSR Distinguished Military Navigator" titles. One out of every two airmen is an outstanding soldier of combat and political training. The number of specialists with a class rating and soldiers with several associated specialties has risen significantly. The achievements and successes of many airmen have earned orders and medals of the Soviet Union. The high evaluation given to the air force personnel by the Communist Party and the Soviet government and their high attention are inspiring the personnel to new achievements.

The successes in development of the Soviet Air Force are the result of the Communist Party's daily activities and of the selfless labor of all Soviet people. It is in party leadership that the main source of the power of the Soviet state and its armed forces lies.

Working for an honorable welcome to the glorious 60th anniversary of the USSR, as with all soldiers of the USSR Armed Forces, the airmen, who are faithful sons of the Soviet people, are prepared to honorably fulfill their patriotic and international duty and to dependably protect the historic achievements of socialism and peace against all transgressions.

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## AIR FORCES

### OPERATIONAL TACTICS: IMPORTANCE OF CLASSES

Moscow AVIATSIYA I KOSMONAVTIKA in Russian No 10, Oct 81 pp 4-5

[Article by Lt Gen Avn G. Federyakov, USSR Distinguished Military Pilot: "What Should the Tactical Training Classroom Be?"]

[Text] Operational-tactical training of executives, flight crews, staff officers and combat control officers occupies one of the most important places in airman combat training. It is no secret that the success with which crews and subunits complete complex missions depends in many ways on the tactics they employ. The deep professional knowledge and habits of the airmen, competent and efficient command decisions, the high proficiency of crews capable of fully utilizing the combat possibilities of their equipment, effective flight control and dependable flight support are all factors of tactics. They presuppose, first of all, a high level and constant improvement of the knowledge of executives and all flight crews, and of the organization and conduct of combat activities. The air warriors must constantly study the theoretical principles of tactics, and they must have the ability to correlate them with the capabilities of modern weapons and practically assimilate combat procedures and methods in a situation as close to real combat as possible.

Experience shows that the tactically competent air warrior is capable of performing the most complex missions with maximum impact at minimum outlays of efforts, resources and time.

Owing to the untiring concern of the Communist Party, our aviation now possesses everything it needs for successful completion of its missions. The combat capability of modern airborne weapon systems is constantly growing. This dictates the need for improving the methods of their use as well. In other words tactics must be on par with the combat capabilities of new aviation equipment and armament.

Raising the effectiveness of aviation's activities depends in many ways not only on the tactical knowledge of the personnel but also on the commander's ability to competently coordinate the methods of combat activity and ensure the greatest efficiency in the use of airplanes and helicopters in modern combat. This requires constant improvement of the operational-tactical training of commanders and staff officers, who must clearly understand the role, place and fundamentals of using every branch of aviation in combined-arms combat.

The most effective ways of solving this problem are to improve the training methods and the training material base, upgrade the quality of operational-tactical training lessons, and introduce modern forms of training into the training process, as is required by the USSR minister of defense.

Tackling the job of creating the training base, our specialists made centralization their principal objective. This made it possible for commanders to understand the practical orientation of the base and the requirements imposed on it more clearly, and to allow the executive staff to study the basic provisions of documents pertaining to combat use of aviation more quickly.

Five classrooms were prepared in the school building of one of the garrisons. They were outfitted under the guidance of Maj Gen Avn V. Gorbatykh. The chiefs made responsible for these classrooms drew up the long range plans for the work.

A group commanded by Colonel V. Didenko did an outstanding job furnishing the lecture halls with working training aids. The operational training classroom, which was equipped by efficiency experts, satisfies the requirements in my opinion (see diagram). It has a tape recorder, a film projector, a television set with a video tape recorder and slide projectors. This equipment is located in a special cubicle partitioned off from the students by frosted glass that performs the functions of a screen and blackboard. Various tactical situations can be created on a movable plotting board furnished with a relief map. Tactical symbols with a sticky back can be applied to the blackboard for this purpose as well.

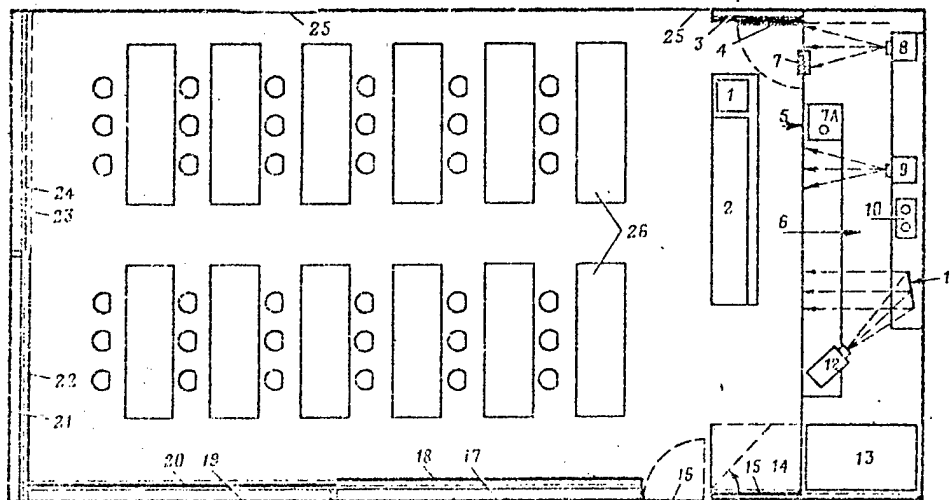


Diagram of Operational Training Classroom:  
 1--rostrum with remote control panel; 2--classroom table; 3,14--display storage; 4--sliding cover on television and slide projector screen; 5--frosted glass wall-screen separating equipment cubicle from classroom; 6--equipment table; 6,25--door and windows; 7--television set; 8,9--slide projector; 10--tape recorder; 12,11--film projector and mirror; 13--movable plotting board and relief map; 15,18,20,22,24--sliding display covers; 17,19,21,23--classroom training displays; 26--classroom desks

The electrified training displays are in wall recesses, and they are covered by sliding ornamental panels. For convenience they can be turned to face the classroom at a 45° angle.

The film projector and television set are turned on and off, the covers over the training displays are opened and shut and the slide projector is controlled remotely from the instructor's console or with a button installed in his pointer. This equipment can be used in automatic and manual, and it can be controlled by synchropulses recorded on magnetic tape.

Three basic electrified displays are installed in the classroom.

The first is entitled "Missions of the Air Force in a Frontal Offensive Operation." It can be used to describe an operation serving as the background of air force missions performed by specific branches of aviation, their objectives, and the different weapons they use against them. One version of the calculations of flying time and the balance of the air forces of the sides, and of the operational-tactical formation is presented. In addition the display shows the zones patrolled by fighter aviation and the planned regions of aerial combat, reconnaissance and independent search of enemy nuclear attack resources.

The second is entitled "Penetrating (Surmounting) Enemy Air Defenses." It shows one of the possible variants in which the probable enemy may deploy his air defense forces and resources. The display shows the formation of frontal forces and resources participating in penetration of the air defenses within the particular zone, the sequence and order of their interaction, and the tactics employed by air subunits and units to surmount the air defenses.

The third display describes the tactics and methods of action of frontal and army aviation in the performance of its missions.

The fourth training display is concerned with organizing air support in the basic periods of fire suppression of the enemy jointly by missile troops and frontal artillery.

The training displays are original, and they are made at a high technical level. They add visuality to lessons, and they can be used to objectively teach commanders and staff officers how to use aviation in modern combat and in operations. It was with a sense of high party responsibility that they were developed by Lieutenant Colonel V. Grebenyuk, Captain I. Shevchenko and Lieutenant Colonel (Reserve) I. Glukhov.

The other four classrooms are outfitted in corresponding fashion: communication and radiotechnical maintenance, reconnaissance training, electronic countermeasures and rear services.

Experience has shown that it takes a great deal of time, energy and resources to manufacture electrified displays. But this is all compensated by the high quality of commander training. The work is done in three phases. First an operational-tactical situation is plotted on the map of the appropriate scale, and the sequence of mission performance is determined. This is done by the best trained officers.

After the executive staff examines and approves the plan, the situation is transferred to tracing paper and applied to the display, the hardware of which was designed by a group of five or six persons under the guidance of an experienced specialist. The excellence of the product depends on the proficiency and creativity of the innovators. Scrapped machine units are used as the control units as a rule. Sound effects are provided to the displays by a tape recorder equipped with a specially written text.

Such a training base provides for effective lessons with commanders and staff officers in integrated operational-tactical training.

Officers attending commander training rallies listened to lectures, attended seminars, group lessons and tactical exercises and worked out problems in a staff war game. The training material was illustrated with diagrams and graphs on color slides, and by training films. Instructive combat training episodes taken with video tape recorders were shown on the television set. When material is gathered and updated in a timely manner, the readiness of the training base for lessons is improved. The officers can obtain advice on problems of interest to them at any time, or refresh their memory of the materiel during independent study hours. An instructor need not be present at such times.

Concentration of the classrooms in a single building and installation of radio communication between them raise the quality of the operational training provided to officers and make it possible to solve coordination problems.

The air commander must not only know combat theory but must also be able to practically organize combat and coordination with other arms and services, and he must be able to utilize the combat possibilities of modern aviation equipment with high effectiveness. The operational-tactical training material base must allow the commander to fully satisfy these requirements. By providing the necessary training aids and introducing modern training methods, we can raise the quality of training provided to commanders and staff officers who wish to learn how to correctly organize combat and creatively and resourcefully complete their missions.

Every military collective has accumulated a certain amount of experience in creating the training base, and I would think that exchange of this experience in various publications would be highly beneficial, since it would reduce the time required by the units to create classrooms satisfying the requirements of the times.

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## AIR FORCES

### BOMBERS: FLIGHT TRAINING DISCUSSED

Moscow AVIATSIYA I KOSMONAVITKA in Russian No 10, Oct 81 pp 6-7

[Article by Maj V. Eydukaytis, squadron commander, military pilot 1st class:  
"'Following the Leader'"]

[Text] An unbroken sea of clouds stretches as far as the eye can see. Brownish spots of desert wink by through occasional breaks in the clouds. Major I. Zayats, the craft commander, glanced at his watch. The turning point and the target approach route were coming up soon.

"What's the situation, navigator?" he asked through the intercom.

Checking the instrument readings with the data he calculated, Captain N. Dvoretzkiy replied with a course correction.

Today the squadron deputy commander's crew was one of the followers of a group headed by the detachment commander, Captain B. Sidorov. The airmen were to make a bombing strike against a target on an unfamiliar practice range. Their air and tactical proficiency as a detachment was being tested.

On announcing the mission of the sortie, the regiment commander cautioned that there were no limits on what scenario inputs might be transmitted to them in the air. Therefore during their preliminary preparations the crews played out several variants of approaching the target and bombing methods. Each pilot and navigator was ready to switch quickly to a back-up variant in the event of changes in the aerial and tactical situation. But this did not alleviate the anxiety: The training mission was not a simple one. The results would be the basis of the grade awarded not only to the skill of the flight crews but also to the labor of those who prepared the warplanes on the ground.

"Comrade Major," the navigator's voice came through the headphones, "we're coming up on the start of the bombing run."

At this moment the leader of the pair banked left, as if having heard Dvoretzkiy's report. The calculations of the navigators aboard the lead craft and the follower were consistent. Major Zayats also turned his craft toward the airplane flying ahead. The detachment was now on its bombing run.

The second navigator completed his sighting data calculations and reported his readiness to the commander. The practice range transmitted its permission to begin the run. It was at this moment that a scenario input was transmitted: "Your sighting system is out of commission...." For an instant this caused confusion among the crewmembers. But only for an instant--there was no time for leisurely thinking. The target was ahead! And nothing was to hinder completion of the combat assignment. Of course, everyone awaited a decision from the crew commander. He made it at once:

"Navigator, we'll follow the leader. Get ready!"

Now everything depended on the craft commander. Reporting his decision to the leader and hearing approval in response, Major I. Zayats negotiated his airplane into position for bombing in tight formation.

Then the target appeared. Brief commands broke the silence of the airwaves. The bomb doors were opened. Major Zayats concentrated all of his attention on the leader. Patience was decisively significant at this moment. The pilot and navigator literally worked as one man.

Finally the bombs separated from the fuselage of the lead airplanes like black droplets.

"Bombs away!" Major Zayats commanded the navigator.

The bomb bay was instantly evacuated, and the airplane jolted upward slightly in response. Then the leader radioed the command to return home.

Not much later, a message stating that the crews had performed an excellent bombing run was radioed to the aircraft from the training ground. Major Zayats turned his head, and his eyes met that of his assistant. Senior Lieutenant A. Bezuglov smiled happily, unable to hide his satisfaction with the results.

During the flight critique the regiment commander gave a high evaluation to the actions of the squadron's crews, making special mention of Major Zayats. He had displayed coolness and patience in a complex situation, he made the correct decision in extremely little time, and he efficiently implemented it.

The results of the bombing run at the practice range significantly increased the squadron's chances for winning the socialist competition for high combat readiness and firm military order.

Being always ready to execute a combat mission is the main goal toward which all efforts of the squadron's commanders, political workers and active party and Komsomol members are directed. Competition in the subunit is an effective means of raising the activity of the soldiers. It has a favorable influence on improving the combat proficiency of the airmen and on forming high moral, political, psychological and combat qualities, and it nurtures a sense of pride for one's profession and for the aviation equipment provided by the motherland.

Competitiveness, publicity, visuality and comparability of results and the possibility of repeating the best experience are doubtlessly the soul, the core of all competition. This is why effective publicity of the results achieved by soldiers and subunits has such a high organizing force. In turn, those responsible for providing the publicity need clear indicators by which to objectively determine the advantages or shortcomings of the competitions. Diffuseness and lack of concreteness are impermissible in such a vitally important function. If a competition is conducted formally, it would not elicit the interest of people or their desire for creativity. Organizing a competition, the subunit commander must spell out, with absolute clarity, the moment when the results are to be summarized and the temporal, qualitative and quantitative criteria.

As an example the radio communication and navigation equipment group headed by Communist Senior Lieutenant of Technical Service L. Bokhun has been an outstanding subunit for several years. Recently this young collective was awarded the perpetual pennant of victory for its successes in the socialist competition with other subunits supporting the regiment. The group chiefs, competently relying on active communists and Komsomol members, managed to effectively organize the training process and organize political indoctrination and public work. Everything new and progressive is carefully studied and generalized. In addition to participating in planned lessons, the soldiers upgrade their political and occupational knowledge on their own, and they fight for high technical competency and culture. The rooms reserved for extended-service personnel are comfortable, and strict order is maintained within them.

Industriousness based on the deep understanding of military duty by each private, NCO, warrant officer and officer has been raised to a high level. The work is done here without crash campaigns in an effort to retake lost ground; this is why there is enough time left over for amateur art, sports and other mass cultural functions. The achievements of the airmen are publicized in the wall newspaper, and their experience is regularly generalized when competition results are summarized. It is no accident that the Komsomol members elected officer Bokhun to the unit's Komsomol committee.

An outstanding aviation equipment group headed by Captain of Technical Service A. Strel'nikov competes with this subunit. During equipment maintenance the soldiers study the methods by which to raise the quality of their jobs and reduce the time required to prepare onboard equipment. The successes of all specialists are immediately brought to the awareness of the rivals.

As we know, flying is the ultimate objective of aviation. And he who has committed his life to flying knows that it is not all that simple to gain proficiency in piloting and in combat use of aircraft. It is important to use each minute of flying time in such a way that it would provide maximum benefit to every crewmember. And this requires daily, meticulous organizational and educational work by commanders.

Analyzing successes and shortcomings, one sometimes is forced to think: Why do some collectives always perform their flying assignments smoothly, without perturbations, while others with the same equipment and personnel with the same occupational training do so with a high degree of tension, often rising to a feverish pitch?

Practice shows that success or failure is often predetermined primarily by the organizational side of the collective's affairs, by how clearly the mission is posed. The soldier's deep understanding of their military duty and of their personal responsibilities, and unquestioning diligence play the decisive role in successful completion of the mission. It is especially important for the commander to be aware of the work and political qualities of his subordinates and of their capabilities and interests (this is what the manuals require). Otherwise it would be impossible to achieve the desired effect.

For example, the personnel of one of our detachments headed by Military Pilot 1st Class Major V. Brychkin achieved high results in the summer training period. The detachment completed its combat training program with high quality. It effectively satisfied, in its practical deeds, the requirement: "Make each artillery shell, bomb and missile count!" The subunit has been declared an outstanding one.

I would call competent organization of ground preparations for flying the main prerequisite of the subunit's success. The detachment commander is identically exacting toward the flight crews and the ground specialists. The work results of the subunit are summarized each day, and the competition results are analyzed weekly. Combat leaflets and flash bulletins are published, and pictorial newspapers devoted to the outstanding soldiers come out on flying days.

The concern of the commander, the party organization and the active Komsomol members for effectiveness of competition is helping to raise the activity of the soldiers and their responsibility for the overall success. Thus during one of the Komsomol meetings Warrant Officer V. Kononkov suggested a way to reduce the time required to suspend bombs from the pylons by several minutes. Initially there was some doubt about his proposal: It is hard to reduce the time of this operation by seconds, not to mention minutes: The time for it was calculated strictly, and every movement and every action taken by the specialists was accounted for. But on verifying the basis of the proposal Communist Brychkin, the detachment commander, persuaded himself that the warrant officer was right.

A training system was organized in the detachment, and a report on it was submitted to me. With the permission of the regiment commander Kononkov's crew was the first to undergo the training. The soldiers carefully honed each of their actions. They also practiced interchangeability of specialists in the crew. A competition organized between them strengthened the spirit of rivalry, and the movement to master an associated specialty strengthened comradesly mutual assistance.

All of this was found to be extremely useful in a tactical flight exercise. Arriving at the airfield in response to an alert signal, Warrant Officer Kononkov's crew loaded the bombs faster than the others, having won several precious minutes. Later on the experience of the soldiers was generalized and disseminated to all crews. As a result the standards for bringing the crews and squadrons to combat readiness were reduced.

Major Brychkin is especially attentive toward the young officers. And sensing this care and assistance, young officers assigned to his subunit quickly gained proficiency. They have all been certified for solo flying under optimum conditions, and they are successfully mastering their combat training program.

Leaders exist not only in the air. They also set the tone on the ground. They are the leaders of all competition, and other soldiers measure themselves up to them. And the struggle for the lead is hard and stubborn. I can confidently say that the collective in which military discipline is stronger and communist rivalry is higher will inevitably win the socialist competition. These qualities are a guarantee of growth of a squadron's occupational proficiency and combat readiness.

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AIR FORCES

PERSONNEL: IMPORTANCE OF OFFICERS' RECORDS DISCUSSED

Moscow AVIATSIYA I KOSMONAVTIKA in Russian No 10, Oct 81 pp 8-9

[Article by Hero of the Soviet Union Maj Gen Avn A. Polunin, deputy chief, Air Force Personnel Directorate: "Officer Certification"]

[Text] The Communist Party and Soviet government devote unweakening attention to the training of officers, to their political, military and moral indoctrination. It was pointed out at the 26th CPSU Congress that if the plans are to be implemented successfully the qualitative composition and job placement of executives must be improved, their qualifications must be raised, the demands imposed on them must be intensified, their efficiency, responsibility, discipline, initiative and adherence to principles must be nurtured, their work methods and style must be improved, and a clear system for monitoring execution of adopted decisions must be established.

These requirements of the party pertain wholly and completely to personnel of the Soviet Armed Forces. Periodic certification of officers occupies an important place in the work with them. Certification is aimed at raising the effectiveness and quality of the training process and troop combat training, of nurturing a high sense of responsibility for assigned work in officers and generals, improving occupational training and strengthening military discipline and order. Certification is an aid to objective evaluation of the political, working and moral-combat qualities of officers and generals, determination of how well each is suited to his job, determination of future career prospects and creation of a reserve of candidates for promotion and training.

The USSR minister of defense adopted a decision to conduct the next officer certification in the first half of 1982. Preparations for it are to be made throughout 1981. Responding to proposals submitted on the basis of the results of the 1978 certification program, the USSR minister of defense published an order enacting a new statute on certification of officers of the Soviet Army and Navy containing a number of amendments and additions.

The last officer certification program significantly enlivened work with military personnel and promoted an increase in the combat readiness of the units and subunits. The overwhelming majority of the commanders and chiefs objectively and completely described the officers undergoing certification, they noted both their positive sides and the shortcomings in their work style, examined the prospects for growth of the officers and suggested recommendations on their promotion. As a rule the

officers that were promoted on the basis of certification conclusions demonstrated the ability to assimilate responsibilities of greater complexity quickly, and they were successful in their work.

For example Officer V. Yunisov displayed a creative, responsible approach to subordinate training and indoctrination after his promotion. He is now knowledgeably managing the combat and political training of his subordinates, relying competently on the party and Komsomol organizations. He is constantly involved in improvements of commander training and the training material base. As a result the subunit's combat readiness is continually growing, military discipline is getting stronger, and the personnel demonstrate high flight proficiency in check-outs. Many such examples can be cited.

To prepare successfully for the forthcoming certification, the officer must consider the experience and lessons of the past. It should be remembered that certification is not a short-term campaign but one of the most important aspects of work with personnel, one including an entire complex of permanently enacted organizational and party-political measures based on planned individual work aimed at political and military indoctrination of each officer and general with a consideration for his service experience, training level and personal qualities. It includes three periods--preparatory, certification and intercertification.

Personal interviews conducted in a principled, good-natured, comradely atmosphere are identically useful and necessary to each officer undergoing certification and to his immediate supervisor. It is important for the subordinate to hear about the positive qualities he needs to develop and about his shortcomings, their causes and the ways of correcting them, and to state his own requests and wishes. To the commander in chief, the personal interview is an effective means of deeply studying and indoctrinating the subordinate, arriving at an objective evaluation of his political and work qualities, determining how to stimulate him to improve his knowledge and proficiency and determine the recommendations on the most suitable way to use him in his subsequent career.

Such interviews will produce tangible results on the condition that they are conducted with adequate lead time, so that the subordinate would have the possibility for correcting the shortcomings in his work and in his personal behavior before certification. Thus in the preparatory period of the last certification program personal interviews were conducted in different units with officers I. Damirov, L. Khomenko, V. Zhuk, V. Zaytsev, V. Batalov and others. During these interviews their shortcomings in performing their official obligations and their behavior were indicated to them. These officers corrected their shortcomings before undergoing certification, and in the intercertification period some of them were promoted.

A good knowledge of the individual properties of subordinates allows commanders and chiefs to conduct effective indoctrination. It was pointed out during an interview and certification to Major V. Andrianov, a detachment commander, that while he did have good organizational capabilities, he sometimes displayed little initiative and was occasionally too hasty in his decisions. Major Andrianov corrected these shortcomings, and later on he was promoted to a new job.

Mistakes were also made during the preparations for and conduct of the past certification program. In particular certain commanders, chiefs and political and personnel organs were unable to get each officer to perform his official duties and maintain discipline in an exemplary manner. Contrary to the requirements of the existing documents, the personal interviews were not conducted with all officers that were to be certified, but only with those who exhibited deficiencies in work or behavior. Full publicity was not provided on the experience of those commanders and chiefs who did not limit themselves to transient meetings with the officers, and who instead held numerous interviews with them before certification so that they could determine how well they responded to remarks and what to say to them in the certification process.

In my opinion it would be suitable to first have the division commander hold interviews with the regiment commanders, then for the regiment commanders to interview their squadron commanders, and then for the latter to interview the flight commanders. Practice has shown that such an order is valuable in that it ensures transmission of the experience of senior supervisors to subordinates, especially to young commanders.

Determining the composition of the certification commission is an extremely important step. Incidentally, it is called a certification commission of a separate battalion, regiment, artillery battalion and similar unit. It is incorrect to refer to it as a certification commission under the commander or a commander's (chief's) certification commission, as has sometimes happened. The commission members examine the certification paperwork and make their own conclusions, displaying high adherence to party principles and objectivity. They are entitled to summon both the persons being certified and the chiefs doing the certification to their meetings. Naturally they must hold the respect of the airmen.

The commission is staffed by deputy commanders (they also head the commission as chairman and deputy chairman)--that is, the immediate supervisors of those undergoing certification, the chief of the political organ, the chief of staff, the secretary of the party committee or party bureau (irrespective of whether his post is an official or an unofficial elected one or whether he is a military serviceman or civilian employee) and the chief of the personnel organ. If because of the organizational structure several certification commissions must be created, such that the corresponding chiefs of political and personnel organs cannot take part in the work of all commissions, deputy chiefs and other senior officers of political and personnel organs who are familiar with the work of officers undergoing certification may be appointed to the commissions.

There were cases in the past where a commander of a military unit was appointed chairman of a certification commission while holding the responsibility of approving the performance reports or making conclusions on them. In such cases one of his deputies must be appointed commission chairman.

The certification commissions should not be too large. It is important that they could be convened efficiently for their work. Experience has shown that it is suitable to include the service chiefs of the regiment, formation and so on as members of a certification commission only when officers of the corresponding service are to be certified.

The provisions on certification presently in force foresee the staffing of certification commissions on the basis of jobs rather than individuals, such that orders announcing change in a commission's composition need not be published whenever members are transferred to other duties. This does not exclude cases where the particular names of the certification commission members must be published in an order because the organizational structure differs from the structure of the troop unit. In all cases, however, the minutes of the meeting of a certification commission and the certification record itself must indicate the names of the commission members who examined the certification records (position, rank, last name and initials of the chairman and the commission members). To permit the commission to continue in its planned work whenever its chairman is absent, publishing an order promoting the deputy chairman to chairman of the commission is recommended.

To keep certification objective and to raise its educational influence, persons undergoing certification should be invited to the commission meetings if it is concluded that their capabilities are not in keeping with the positions they occupy or if significant shortcomings are noted. The certification records of such officers must be approved by the chiefs responsible for their appointment.

Inasmuch as it has been officially foreseen that officers attending school undergo certification upon completion of their schooling while officers called up for two or three years of active military service undergo certification when called up for regular duty or retired into the reserves, certification commissions must be created for the entire intercertification period, and not just for the purposes of examining certification records within a particular time interval.

Local inspections have shown that measures to prepare for and conduct certification of air force officers in 1982 are basically being fulfilled, but more attention should be devoted to the work in the subunit--groups, flights, detachments, companies and squadrons.

As an example efficient preparations for the next certification program have been started in the air regiment in which Lieutenant Colonel G. Kuznetsov serves. Here all of the officers have studied the certification statute, concrete tasks have been assigned to all officials, and lessons are being held with the members of the certification commission and with the commanders and chiefs.

But this work is still not going on in its full volume everywhere. Some commanders and chiefs think that there is still enough time before certification begins. But if they reason in this way, they do not fully understand the very essence of certification. Such commanders must be corrected, so that their preparations for certification would be planned out and well conceived. Certification should raise the sense of personal responsibility officers and generals have for implementing the decisions of the 26th CPSU Congress and the orders and directives of the USSR minister of defense, the chief of the Main Political Directorate of the Soviet Army and Navy and the commander in chief of the air force.

The certification program will doubtlessly have the result of raising the officers' sense of responsibility for their military duty and their official obligations, and of increasing their desire to gain improvements in the quality and effectiveness of military work more persistently and to raise the combat readiness of the air units and subunits.

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AIR FORCES

PERSONNEL: FAMILY'S TRADITION IN AVIATION DISCUSSED

Moscow AVIATSIYA I KOSMONAVTIKA In Russian No 10, Oct 81 pp 22-23

[Article by Col Ye. Besschetnov: "Continuity"]

[Text] The intensity of the jet engine roar from the airfield grew. The crew of a long-range bomber was taking off on a sortie. USSR Distinguished Military Navigator Colonel N. Glazunov, with whom I halted beside the headquarters building, interrupted his narration until the thunder of the jet engines died down, after which he went on with the same persistence:

"Do write something about the Popovs, you must. They deserve it...."

Yes, it has become a good tradition in many Soviet families for the children to inherit the specialties of their parents. Thus arise dynasties of working and military families. Thus I was not surprised by Glazunov's report that Senior Lieutenant Igor' Popov had chosen the same path in life, the same profession chosen by his father, Viktor Serafimovich. I was not surprised because such continuity has long been the order of things in our country. Nonetheless, there was something unique to this case: Both officers now serve in the same regiment. Both enjoy great authority and respect in the collective. Major V. Popov is an aircraft navigator, while Senior Lieutenant I. Popov is a second navigator. They in a sense represent the inseparable tie between the generations of Soviet soldiers faithfully performing their filial duty to the motherland. I wanted to get to know these people more closely, to learn how they live, study and serve.

It was not until a few days later that I was able to meet Major V. Popov: There was much business to contend with. Viktor Serafimovich was a short, thin man with darting, animated eyes. His natural modesty made him shy, but little by little he opened up, and began recalling the details of his career.

Viktor Serafimovich tied his fate to the army more than a quarter of a century ago. How did his interest in aviation begin? It is perhaps difficult to answer that question today. Perhaps with the deep, ineradicable impressions left upon the young boy's heart by the heroic deeds of Soviet pilots in the past war, about whom he heard and read so much. Or perhaps it all began with the sight of a contrail drawn on the sky above by a jet airplane--one of those which began entering the Soviet Air Force at that time. Whatever the case, the dream grew stronger and soon turned to reality. When Viktor announced his decision to his parents after graduating from secondary school, his mother, Klavdiya Nikolayevna, sighed at the thought of losing

her son so soon, while his father, Serafim Mikhaylovich, a former frontliner who had his share of experiences in the mother-infantry, gazed at him gently and said with an air of satisfaction: "Good for you! I agree with your choice. This is a serious step you're taking. But be sure you know what you're getting into. Aviation is now starting on the road of jet propulsion...."

Viktor Popov was sent to a military navigator aviation school on the basis of a Komsomol recommendation. He learned the secrets of navigation and other aviation sciences with persistence and diligence. His interest in knowledge and his desire to study all of the fine points of a subject became firm traits of his character from that time on. On becoming an officer and a military navigator, he continued to improve his skills stubbornly. All the more so because life was posing new, complex tasks: At first he flew Il-28s, for which he had been trained in the school, and later on he was transferred to long-range bomber aviation. It became necessary to retrain, and to learn many new things. Now Major V. Popov is a veteran of the unit, and he has served in the regiment for more than 20 years.

All with whom I discussed this officer said the same thing: Viktor Serafimovich is distinguished by calm reasoning, the ability to solve complex problems independently and initiative in finding solutions to difficult situations. The crew in which he is a navigator flies sorties thousands of kilometers long. Whenever the situation requires him to make a decision, he always arrives at the most optimal variant. Later on, when his mind returns to the events of the flight, he analyzes his actions and tries to find a better decision. He compares his conclusions with the opinions of experienced comrades in the same work. And what he usually hears in response is this: "Don't worry, Serafimych. You made the right decision. And you acted faultlessly." Incidentally even in flights that are referred to as routine he displays initiative and persistence, trying to fulfill his assignment as best as he could.

Having traveled an enormous distance over forests and tundra, the aircraft crossed the coastline, which was hidden from the eyes by clouds, and assumed a course toward the location of the training target. The radio navigation points were now left far behind, and orientation was difficult. Using all of the piloting resources integrally, Major Popov determined the location of the aircraft and its lateral drift from the required course, and he made the corrections in his calculations. It was his job to get the airplane precisely over target on time. He worked with his attention fully concentrated on what he was doing.

The target drew nearer and nearer. The navigator made the last corrections and bent over the radar site. The bomb doors were opened. The craft commander held strictly to the required course. Finally the bombs separated from the airplane and fell right on the target.

Imagine how many flights of this sort Viktor Serafimovich has been credited with! He has flown more than 10,000 hours, and he remembers many of his sorties well. Each of them represents maximum exertion of moral and physical strength, anxiety and emotion. How can one forget, as an example, the time when the crew spent almost a whole day in the air? An enormous distance had to be covered. The flight was a serious test of each crewmember's moral and psychological stability and combat proficiency. They all passed the test honorably. And having surmounted the difficulties, they felt themselves stronger and more confident.

For the last few years Viktor Serafimovich has been flying with craft commander Major M. Razuvayev. They understand each other intuitively, and their actions are faultlessly coordinated. Three years ago the crew earned an outstanding rating and the perpetual Prize imeni Hero of the Soviet Union Colonel N. Zuyenko. And since that time the crew has remained on top. Its results in tactical flight exercises and various inspections are always high. The craft commander naturally does a great deal to achieve this status, but the contribution of the navigator is substantial as well. It was owing mainly to him, Major Popov, that the crew achieved an envious result in navigation and bombing training--a score of 4.7.

True laborers are always distinguished by modesty. This trait is fully inherent to Viktor Serafimovich. He does his work without fanfare, quietly, modestly and honestly, giving no thought to reward. He has been a first class navigator for a decade and a half already. And his flying time is more than adequate. In a word, he had everything he needed to pass the examination for the supreme combat qualification--a military navigator-sniper. But because of his modesty he did not wish to stand out from the rest. Colonel N. Glazunov decided to have a talk with him.

"The examinations are not just a personal matter for you," he said. "The prestige of the regiment and the military collective, which assisted you in rising so high, is at stake as well. Start preparing yourself seriously. I'll help you with anything you need."

Major Popov discarded his last doubts. And whenever he decides to do something, he puts all of his strength into it, and he reaches his goal. He applied himself to his studies, and he refreshed his memory of navigation theory. His senior comrade was often at his side, supporting and helping him. The aircraft commander trained carefully simultaneously with the navigator. The result was a happy one: Viktor Serafimovich passed the test. He was awarded the "military navigator-sniper" title, while bomber commander Major M. Razuvayev earned the "military pilot-sniper" title.

It was difficult to rise to a higher rung of proficiency, and it was even more difficult to stay there: Each year the air force holds sniper competitions in which the cream of the crop participate. Their crew is invariably successful in the competitions, especially in bombing. In this respect Viktor Serafimovich truly has a sniper's eye. The officer has a wristwatch which he treasures as a precious memento--a gift he won for taking first place in one of the competitions.

As with every real master, Major Popov has many worthy students, and he spares no effort in work with the young. When a recent school graduate, Kasym Masalimov, was assigned to the crew as second navigator, Viktor Serafimovich took him under his wing. He was somewhat troubled by the fact that Masalimov, who aspired to prove his capabilities faster, worked too quickly, as a result of which he made mistakes and suffered undue pressure. Communist Popov patiently taught him to be calm, collected and thoughtful, and he described how he would himself act in a given situation. After working him through the entire basic flight program, he helped him learn the ropes of long-distance combat sorties. Now Senior Lieutenant K. Masalimov is a navigator 2d class.

Veteran navigators are not shy about asking Viktor Serafimovich for help. Some seek his opinion on how to better organize the training of the young complement, while

others ask his advice on how to complete a new complex assignment successfully. Major Popov can often be seen at the classroom blackboard, where he analyzes the navigation calculations with professional confidence, makes corrections and suggests to his colleagues how they can arrive at the right solution.

Communist Major V. Popov enjoys the glory of one of the best navigators of the unit. His authority is untarnished. Viktor Serafimovich has been elected to the squadron party bureau several times. For many long years he has been the incumbent chief of the crew's party group. The highest recognition given to the services of this officer was the order "For Service to the Motherland in the USSR Armed Forces," 3d Degree, given to him 2 years ago.

Senior Lieutenant Igor' Popov of course has far to go to achieve his father's glory. His proficiency is not yet what it should be, and his experience is still lacking. After all, he is just taking off in his career. But the young officer is on the right road. He takes his studies seriously, and he is diligent and industrious. He is valued in the collective. When an officer had to be appointed to a second navigator slot in the crew of the regiment commander, the choice fell on him: He was a well trained, reliable, responsible person. And now he is justifying the high trust shown in him.

What was he to be when he grew up? Igor' never had to face this question. Ever since he can remember, he was surrounded by things having to do with aviation. His father organized a "tour" of the airfield while he was still a young boy. He took him to the parking pad and allowed him to sit in the cockpit and to play with the controls, buttons and switches. Later on, Igor' developed his own unrestrainable attraction to the powerful combat craft. He could imagine no path in life other than flying. And of course he wanted to be a navigator, like his father, whose authority was greater than that of anyone on earth.

After graduating from school he went to the Chelyabinsk Higher Red Banner Military Aviation Navigator School imeni 50-Letiye VLKSM. And when lieutenant's stripes appeared on his shoulderboards, he was assigned to his father's regiment! His father broke him in and gave him his first practical lessons. This is the third year that Igor' Popov has been serving in this collective.

Not that long ago a memorable event occurred in Senior Lieutenant Popov's life: He was accepted into the party. Giving him his party ticket, the chief of the political section shook his hand firmly and said:

"Congratulations, Igor' Viktorovich, on entering the ranks of the great party of the communists. This is not only a great honor but also a great responsibility. I am sure that you will continue in the family tradition of faithful service to the motherland with honor."

"Thank you for your trust. I will try. I will not let you down," the young officer replied, controlling the agitation in his heart.

And old family friend of the Popovs, party commission secretary Lieutenant Colonel V. Pervushin congratulated him as well. Pervushin embraced the young officer, pressed him closely to himself, and said to the chief of the political section with emotion:

"I, Vyacheslav Dmitriyevich, have known him since he was wearing diapers," he nodded toward Igor'. "He grew up before my eyes. He has always dreamed of flying. And now he is a man on his own. An officer. A navigator 2d class. A communist. How time flies! Just watch, in a little while the young ones will take our places."

"That's the way things go. That's dialectics...."

The army environment makes the individual communicative. And Igor', who is not yet saddled with family responsibilities, has many friends. "His door never seems to close," jokes Viktor Serafimovich. People visit him to share their thoughts about previous flights, to return an interesting book to his personal library, and to listen to a new tape recording or to Igor' singing a new popular song to the accompaniment of a guitar.

The youngest member of the Popov family--Serezha (he is in fifth grade now)--can invariably be found among the happy high-living young officers as if attracted by a magnet. He listens with keen interest to conversations about flying, sometimes he asks questions, and then suddenly he falls silent, thinking about something.

"Here's another one that's going to grow up to be a soldier," laughs his mother, Lyubov' Stepanovna, who works at the garrison's officer's club. "That's a sure thing: He'll go into aviation...."

On days off the Popovs go fishing in their "Moskvich" as a whole family, and on leaves they all go south.

But work is always first with them. This is why one often sees them together, Viktor Serafimovich and Igor'. In the mornings they hurry along the paths of the post to the regiment headquarters for formation, during the day one would find them on the concrete pad of the airfield or in the flight shack, leisurely discussing some question before taking off on a long-distance assignment, and after the flying is over, they return home, exchanging their impressions. Behind this outwardly ordinary and commonplace exterior lies something great and important: An invisible process of transmission of life-giving traditions and ideas from father to son, a process of that continuity which serves as a strong, unbreakable link between the old and young generation of Soviet people.

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