

- Correcting organization
- Improving technique
- Developing cadre, etc.

As to organization:

Made progress in realizing a new, set system of organization from above; speeded up the task of expanding organization down to companies, because, as the demands of combat were expanding in strength and complexity, liaison needed to become quicker and more secret, especially in operational orders, for which the expansion of cryptography to the companies had become an essential ingredient.

As to the specialty:

Had to strengthen and consolidate the task of encrypting and decrypting in order to realize the slogan, "swift, secret, and careful." To carry out the summarization of encryption-decryption experience in order to publicize it for the units. To unify the methods of the task, the way of working; to promote specialty rules of conduct.

As to production and research:

To continue to research and produce per the resolution of the fifth conference. . . Both at Central cryptographic and cryptographic at the Intersectors there had to be produced a new type of system in order to break away from the systems in use. The Central Cryptographic Bureau type of system had to be in place by the end of 1950.

As to training:

Start refresher classes and develop new people. Build a base for a cryptanalysis branch.

As to the cadre task:

Pay attention to speeding up the task of developing cryptographic cadre, especially cadre with capability, education, and a specialty technical aptitude in order to serve in the stage of preparing for the general counteroffensive. Getting cryptographic personnel specialized: this point meant that, in order to serve the branch, cryptographers would have to shun unsettled thinking, become more innovative, with the capability of understanding. Thus it would be officially recognized that the cryptographic branch is a specialty branch, just as are other branches.

The conference sent a message to President Ho Chi Minh and the General Commander in Chief, and, at the same time to the Intersector headquarters, pledging single-minded nonstop emulation to build the army cryptographic branch big and strong, so that every mission in the new stage would be well accomplished.

This was a significant conference in the process of building the branch. The conference unified a correct outlook toward the building of organization and the expanding of professional technique; it resolved in a relatively and adequately concrete way those tasks

which were immediate as opposed to those previously encountered, created favorable circumstances for strengthening organization and realizing directives concerning professional specialization, unified technique branch-wide, changed quickly to meet the army's requirements for building and fighting in the new expansion.

In August 1949, the 308th Division [dai doan] – the first main force division of our army, with the epithet "Vanguard Division," was formed. The division Cryptographic Section and the cryptographic teams of the 36th, 88th and 102nd regiments appeared, with very opportune reinforcements from the Cryptographic Bureau of the MND/High Command as far as organization, cadre, setting up liaison nets, etc. Cde Hoang Hong Hy, cadre from the General Staff Cryptographic Bureau, was assigned as chief of the 308th Division's Cryptographic Section.

In March 1950 the Cryptographic Section of the 304th Division was formed, with cryptographic teams in the 9th, 66th, and 57th regiments. Cde Ngo Duc Tri, cadre of the Intersector 4 Cryptographic Section was decided upon as chief of the division cryptographic section.

In December 1950 the Cryptographic Section of the 312th Division was formed, with cryptographic teams in the 209th, 141st, and 165th regiments. Cde Nguyen Thanh Mai, cadre of the Intersector 1 Cryptographic Section, was assigned as section chief.

Based upon the previous regimental cryptographic organizations, when consolidated to establish division cryptographic there were reinforcing conditions that took us another step in organization and the professional task.

In order to guide the Resistance in its powerful spread, in June 1950 the Standing Committee of Central Party issued a decree to straighten out the organization of MND/High Command and to create the mechanisms for Party direction. Per this decree: The High Command [Bo Tong tu lenh] would comprise the General Staff, the General Political Directorate, and the General Directorate of Supply. High Command organizations were established. "These changes were quite significant in making military mechanisms more concentrated and responsive."

In June 1950, the MND Cryptographic Bureau and the Cryptographic Bureau of the General Staff were merged to form the General Staff Cryptographic Bureau under the direct guidance of the Chief of the General Staff. Together with the specialist organizations in the General Staff, such as Military Intelligence, Ordnance, Militia, Communication-Liaison, Engineers, Quartermaster, etc. the cryptographic organization of HQ "was increased in organization and readjusted in responsibilities in accordance with the requirements and guidance of the liberation struggle expanding into a new stage."¹⁵

The Cryptographic Bureau of the General Staff was organized in four sections:

- The Research, Production, and Cryptanalysis Section
- The Training and Control Section
- The Encrypting and Decrypting Section
- The Clerical [van thu] Section

In the Encrypting and Decrypting Section, there was an element to watch closely the mission of encrypting and decrypting with the nets and places in the South, one for encrypting and decrypting with sectors in the North, and one for encrypting and decrypting in the service of the campaigns.

The chief of the General Staff Cryptographic Bureau was Cde Hoang Van Dong. The Bureau "continued to correct its organization, researched improvements in the army system of cryptography consistent with the operational mission; unified the organizational system from Central down to basic elements; developed cryptographic cadre and personnel to supply to the units and theaters of war and supplied organizations outside of the army, such as elements abroad; continued to mobilize the cryptographic system production emulation campaign; strengthened the cryptographic base in Nam Bo; and expanded the cryptographic base in Laos-Cambodia."

The bureau had a [Party] cell [chi bo], each section had a Party team [to Dang], and the number of Party members was much larger than previously. During this period the Cryptographic Bureau was augmented by Cde Le Thanh Hai as bureau political commissar, concerned both with Party tasks and political tasks, the bureau having many worker activities-- growth, education and sports - and was a participating unit in the vigorous emulation campaign among General Staff organizations.

There were separate cryptographic elements in the organizations of the General Political Directorate, General Directorate of Supply, and Directorate of Military Intelligence,¹⁶ but they were under the technical and professional direction of the General Staff Cryptographic Bureau.

In 1950 the Main Military Committee appointed Cde Nguyen Chi Thanh, member of the Central Party and concurrently head of the General Political Directorate, to personally lead the army cryptographic branch, while at the same time a number of Party Cadre were posted to the army cryptographic branch. Among these cadre were those of regimental level, some of district committee member level or of party cell committee level.¹⁷

The work of increasing the number of cadre and merging the MND and General Staff cryptographic organizations, creating favorable conditions for building a strong and stable cryptographic bureau, advanced us well in performing mission responsibilities.

In July 1950, the Seventh Army-wide Cryptographic Conference reviewed and drew experience from the realization of the decisions of the sixth branch conference, continuing to issue direction for the army cryptographic task in the approaching stage. This conference pulled together a number of large problems, such as emulation in cryptographic system development, raising the level of cryptographic technique; speeding up training in

raising the level of combat mindedness and the level of political thought on the part of soldier-cryptists; unifying guidance along the vertical axis of the cryptographic task in the army.

It can be said that, by the Seventh Army-wide Cryptographic Conference, the cryptographic branch had built a system from Central down to basic elements. As for responsibilities and the mission of the cryptographic organizations at the various levels, those had also been clearly settled: The General Staff Cryptographic Bureau had the mission of encrypting and decrypting, researching cryptographic techniques (codes and ciphers) and supplying cryptographic materials to the fifty-eight units, training new personnel, cryptanalysis, and guidance and control over the specialty task of the branch. The cryptographic sections of the Intersectors and divisions had essentially two missions, encrypting and decrypting telegrams; researching and producing cryptographic systems [luat] to supply to directly subordinate units; and developing new personnel when delegated from higher echelon.

In order to overcome the obstacle posed by lack of cryptographic cadre and personnel and speedily raise the level of cryptographic cadre and organizations, and with General Staff concurrence, in 1950 the General Staff Cryptographic Bureau organized four consolidated development classes. Two of these, "Le Hong Phong" and "Le Lai," to develop cryptographic cadre, opened in the Ban Co jungle, Yen Thong village, Dinh Hoa district of Thai Nguyen. Cde Bureau Chief Hoang Van Dong personally took charge and taught, together with comrade instructors Ho Quang Chinh and Le Van Bang.

The [other] two classes, "Chi Lang" and "Lam Son," to develop personnel, were under, and taught by, Cdes Tran Dzuy Trong and Le Dinh Y.

The total number of students in these classes was 200 comrades, some being old soldiers, some recruits, some transferred from the Ground Forces School, or party cadre from the Party and Government organizations assigned to go study.

The curriculum content was fairly comprehensive in layout, with respect to political matters, military matters, technique, and professionalism, comprising both theory and practice. Before studying the cryptographic specialty, students studied political matters, to thoroughly grasp the mission situation and establish the thinking of volunteerism in long-term service in the cryptographic branch, after which an appreciation of the value of the organization would result in a formal determination to study. Each of the four classes established a party cell; each comprised party members as instructors and party members as students.

One day early in May 1950 there occurred a great and unexpected honor for the cadre-students in the Le Lai class: Uncle Ho arrived for a visit en route to his task. From the night before the day Uncle promised to drop by and visit, until 0500 the day after, absolute secrecy had to be maintained. From early morning, all of the class assembled, waiting to meet Uncle. The school was in a jungle area at the village of Yen Thong, Dinh Hoa district, Thai Nguyen. Upon seeing Uncle coming by horseback from a distance, everybody, young men and women, stood up and raised the shout, "Long live President Ho!

Long live President Ho!" The shouting rang throughout the jungle. Dismounting, Uncle turned and said to Cde Ho Quang Chinh, who was in charge of the class and had come out to meet Uncle, "I cautioned you, young fellow, to keep this a secret! What in the world is this?" Uncle then went to the place where the young people were and shook hands, saying "No more shouting." Seventy young people surrounded Uncle, like his little nieces and nephews, to meet him. Cheerfully waving his hand for each person to be seated, Uncle's bright eyes and gentle disposition took in the entire class at one time, Uncle asking, "Where are the girls and boys of Sector 3? Sector 4? Viet Bac? Sector 10? They must be around here." Hands were raised in turn. Uncle patted the head of one comrade with malaria, who had lost almost all of his hair, and asked, "Are you still feverish, son?" The comrade student was deeply touched: "Dear Uncle, we got to meet you: now the malaria is gone, sir." Speaking to the class, Uncle recommended along these lines: Our resistance against France grows more victorious, our army grows larger, but still there are many difficulties and hardships to be met. Uncle and the Central comrades work overtime, but we must also go into the jungle to gather bamboo shoots in order to improve. It is good that you young people grow like that. If we lack vegetables we can gather banana buds and banana flowers in order to improve, and make salad, but not have much to eat. As to the mission of studying and the task, Uncle instructed, "Cryptography is a secret task, tremendously significant. It was essential that the General Staff open classes like this. You young women and men have the trust of the Party and the High Command--you must study well and work well. Cryptography must be secret, swift, and accurate. Cryptographers must be security conscious and of one mind. I greet you all and wish you well."

Because he was busy with much work, Uncle only visited the class for a few minutes, but his words and his sentiments of concern for the cryptographic branch were truly unlimited and profound. From that time, three of his words were inscribed--"secret, swift, accurate"--to become the guidelines for the task of the cryptographic branch, and the word "single-minded" became the sentiment and way of life for the cadre and personnel in the entire branch guiding and assisting each other in accomplishing the mission and building a tradition for the army cryptographic branch that was fully satisfying in every respect. Each person increased his efforts to study, strove for improvement in training, and to raise the level of professional capability, appropriate to the solicitude and trust of the Party and Uncle.

Also from 1950, the task of developing and building the cadre ranks and regulating the selection of people to enter the branch became tighter each day, with special attention to choosing people from a working class background: the selection process for persons entering the branch was carried out with caution. Cde Nguyen Chi Thanh had important instructions concerning the political task, ideology, organization, technique and conduct of work vis-a-vis the army cryptographic branch. The General Political Directorate instructed the [Party] executive committees to select their very best for cryptographic work and diligently organize to cultivate cryptographic cadre and personnel who had not

yet entered the Party to become party members. By the end of 1950, almost all cryptographic cadre and personnel in the army were party members.

Besides the cadre development classes at HQ and the Intersectors, on-the-job organization and development continued to be carried out, according to the requirements of cryptographic communication nets [mang thong tin bang mat ma], such as in the regions temporarily in enemy hands, and the distant theaters, such as Trung Bo, Nam Bo, etc.

In league with the above activities, the branch also commenced the implementation of a tighter system of administration, promotion, and employment of cadre and personnel in the branch. A number of systems of commendation and reward and fostering came to the attention of the upper echelon.

The task of developing army cryptographic cadre and personnel in the years at the beginning of the resistance involved many efforts to respond to mission requirements.

EMULATION TO BRING INTO PLAY AND IMPROVE THE LEVEL OF CRYPTOGRAPHIC TECHNIQUE

From 1950, the resistance was stronger, but larger-scale campaigns were opening, one after another. The cryptographic organizations and cryptographic warriors on assignment all over, in the provinces and theaters, had overcome many tough situations in order to meet the wide-ranging requirement to ensure command by cryptography in battle. And also, through the practice of serving in battle, many weaknesses in the type of technique being employed were exposed and needs had to be instantly taken care of.

Vis-a-vis our cryptographic branch, the French colonialists had organized many cryptanalytic organizations comprising many experienced people, while at the same time expanding their espionage agents to plot to exploit our secrets, from central organizations down to the sectors. In one dash against lines of communication in Nam Bo, we collected a quantity of enemy cryptanalytic documents, among which were cases in which our messages had been broken out, etc.

Marking well the words of Uncle: "If we know the enemy clearly, then we win. If the enemy knows us clearly, then we lose, so we must ensure secrecy. . .," the army cryptographic branch constantly set a high level of vigilance, never ceased to improve and raise the level of technical secrecy, while the communications troops "regularly change cryptography and station schedules, we militarize the radio station and cryptographic organizations" per the instructions of the Central Party Standing Committee.

At the Seventh Army-Wide Cryptographic Conference (1950), the role of the technique research task was defined more concretely in the overall task of cryptography, generally speaking. The responsibility and authority of the technique research organizations were decided upon as follows:

"The Research and Development Team in the Research and Training Section has the responsibility and authority for research and development of cryptographic systems, and for handing long-life systems to the Intersectors, divisions, and directly subordinate units, the organizations in the High Command, and delegations, and for monitoring and remedying the cryptographic situation nationwide.

"The R&D Team in the Campaign Cryptographic Section (subordinate to the Cryptographic Bureau) has the responsibility of R&D on systems to serve campaigns, essentially for the main force divisions and regiments, and for monitoring and remedying the cryptographic situation in the sphere of main force units engaged in action."

In the Intersectors, "The Cryptographic Section has one R&D cadre, with the responsibility for R&D, distributing systems to the regiments and provincial units, battalions, and district units, and monitoring and remedying the cryptographic system situation in units served.

"Creations of cryptographic material must be sent up to the Central R&D organizations for examination, remedy, and drawing experience. Whenever the R&D task is adequately taken care of with cadre and personnel and means of making cryptographic systems for the regiments and provincial units, the Intersector will not have the above responsibility and authority.

"... In essential cases, the division cryptographic section may make and give out codes and secret signals [am hieu] for essential units and report to the Bureau..."

Warmly responding in years past to Uncle Ho's call for patriotic emulation and implementing the order "Train the Army, Achieve a Feat," from the High Command, the cryptographic branch officially mobilized a "high" in the emulation movement, "Bring into Play Innovation and Improvement of Technique," by practical slogans, specifically, "Each Cryptic a Compiler [of cryptographic systems]." In the competition to develop cryptographic systems, there were scores of the best selected by the Intersector Cryptographic Sections and sent to the Cryptographic Bureau for examination. These systems comprised many different forms [the]: three-element [the], four-, five-, and six-element--mostly four-element and three-element.

Four-element systems sent to the Bureau from the units for reporting and examination were used in the units in all shapes and forms. Four-element chart systems were used in nearly all conceivable forms. Depending on method, the four-element could be used for encipherment perpendicular combined with right angle or encipherment entirely by right angle.

At the end of 1950, the General Staff Cryptographic Bureau, i.e., two technique research cadre (comrades Dzung and Con), using as the model a chart system with a method of breaking down and combining [words in] two parts, invented in Intersector 4 in 1949, applied it in a four-element form, and produced the type of system of preeminence, known as ZC-4 [Vietnamese DzC-4: Dzung and Con's 4-element system?].

Code chart DzC-4 used a complete square for encryption, using substitution by 4 encrypted values [ky hieu ma]. If the number of plain units was not large, one could use chart sizes 13x26 up to 26x26, according to circumstances and conditions of use.

System DzC-4 brought into play many strengths and showed creativity, as a type of system with high value from the standpoint of protecting secrecy and also of value in practical use, for it broke up and combined syllables simply, logically, neatly, and purely, with a basis that was both scientific and fresh. Encrypting and decrypting were quick and simple, and the capacity for accuracy was high. Messages were shorter, compared with encryption by other types of system; speed increased in converting the contents of secret messages. The system could be used with many types of key strips, a favorable consideration in production and use. The form of substitution was uniform for all plain units in the chart, the ratio between the two parts of a syllable in composition being 115/145. This satisfactorily resolved the balance in frequency between the two components.

The DzC-4 code chart clearly took us a step forward, marking the growth of the code chart research task of the Vietnamese cryptographic branch.

The DzC-4 form of system afterward spread rapidly in application among the units. Types of systems similar to DzC-4 were Intersector 5's 1H1-54 system, Nam Bo's HCM [Ho Chi Minh?]-3-53 (used in 1953), a system of the 325th Division (in the years 1952-1954), Intersector 4's Hoa Binh [PEACE] system (used in 1954), etc.

The three-element system was also produced in many types: by 1950 it was being used widely in Nam Bo.

Task standing operating procedures, principles, and tables of organization with respect to professional decisions of the branch received close and thorough attention from the responsible organizations at the various levels from day one. From the "Ten Commandments of the Specialist Task" through the realities of guidance and use, the Cryptographic Bureau came up with the "Thirty-four Commandments of the Specialist Task," dealing concretely with the problems of protecting cryptographic secrecy and the internal aspects of the task, with respect to the work practices and relationships of cryptographic cadre and personnel. The Cryptographic Sections got element and individual responsibilities nailed down. In the Bureau and a number of Intersectors and divisions, specialization was realized net by net, each person receiving a fixed, set number of systems, the person using them to be responsible for following the observations of strong and weak points noted in use of the cryptographic materials, both to complement the construction of systems that became richer with each passing day, and to avoid technical errors.

The task of technical direction and use had positive measures, mainly in not letting the enemy have the time and circumstances to implement trickery in order to penetrate our cryptographic systems.

The emulation movement made systems, researched, and immediately produced systems on the spot as a result, but there were systems constantly guaranteed with strict regulation with respect to period of use, replacement of key strips [bang khoa], increasing the types of reserve systems to prepare for prompt replacement in a time of necessity or a sudden task, etc.

From 1950 on, systematic review and assessment of procedures and technique was constantly maintained in every unit. The rules and processes of encryption and decryption never ceased to be perfected and made uniform in the branch. The chain-link method of operation was applied, involving mind-set, hands, eyes, and nervous reflexes on the part of each person encrypting or decrypting. The method of reading code values twice-over was improved by a single reading, the effect being to cut the time and eliminate mistakes in hearing and reading letters of the alphabet [chu cai]. Many comrade cryptographers were highly polished, becoming skilled cryptographers with a proficient level of professional technique and enhanced productivity, capable of meeting command and control requirements.

THE CRYPTOGRAPHIC TASK IN THE AUTUMN-WINTER BORDER CAMPAIGN OF 1950

By 1950, the international and domestic situations had evolved favorably for us.

In August 1950 the Central Party Standing Committee decided to open the Border Campaign (still known as the Cao [Bang] - Bac [Kan] - Lang [Son] Campaign): "The campaign requirements are to annihilate a vital, important enemy element; to liberate the northern border region of our nation; to restrict the scope of the enemy's occupancy; to enlarge and consolidate the Viet Bac base area; to progress toward seizing the strategic initiative in the main theater."¹⁸

After the politico-military conference of 24-25 August 1950, permeated with the determination of the campaign Party committee, the comrade Chief of the General Staff decided to set up a forward staff organization of the High Command to perform the functions of a campaign staff [Bo tham muu chien dich], comprising operations, military intelligence, cryptographic, communications, and administrative management sections.

The campaign took place in an extensive area of mountainous jungle, thus ensuring that communications-liaison and cryptography would be a serious problem. In accordance with a directive from the Chief of the General Staff, the Cryptographic Bureau urgently prepared the organization to ensure a cryptonet. The bureau convened a conference of cadre in charge of cryptographic organizations from the units participating in the campaign, thoroughly grasping mission requirements, unifying a plan to align cadre and personnel forces and setup a cryptonet, and giving direction in the use of technique and methods of organizing for work in the campaign.

The Campaign Forward Cryptographic Section and the mobile cryptographic teams serving reconnaissance and command of the General Staff organs were organized so as to

align forces for the expanded mission. The cryptographic forces of the participating units also were mobilized to a high level, comprising

The 308th Division Cryptographic Section and the cryptographic teams of the 36th, 102nd, and 88th regiments.

The Intersector Viet Bac Cryptographic Section and the cryptographic teams of the Cao Bang and Lang Son Provincial Units.

The General Supply Directorate Forward Cryptographic Section.

The cryptographic teams of the 174th and 209th Independent Regiments.

Mobile cryptographic teams.

On 1 September 1950, the Campaign Forward Cryptographic Section, under Cde Nguyen Chanh Can, together with the campaign staff organizations from HQ, set out for the front. On 4 September in Na Lan (Cao Bang), cryptographic cadre and personnel constructed places to mess, quarter, and work, as a matter of urgency, while serving command of the troops maneuvering to consolidate and transporting rear services materiel for the campaign.

This was a campaign in which main force troops were first concentrated for large operations: from the beginning to the end of 1950 we had the artillery and engineer branches combined in combat with the infantry--a lengthy campaign, with many large engagements following large-scale forms of operations, compared to previous campaigns. The task of ensuring cryptographic technique in the service of command produced new requirements, complex and more urgent. The campaign cryptographic organizations and the units alike lacked cadre and personnel, professional knowledge and means, and experience in organizing to implement the tasks of a large-scale campaign. However, throughout the campaign, cryptographic cadre and personnel overcame each obstacle to meet the requirements of command and control. Many operational orders were encrypted and decrypted quickly, accurately, and in a timely manner. Cryptographic cadre and soldiers had the honor of handling messages containing Uncle's recommendations to the troop units concerning the Cao-Bac-Lang campaign: "... The Cao-Bac-Lang campaign is very important. We must resolve to win the battle; soldiers on this front must be determined, 100 percent valiant; soldiers in the sectors and other fronts must strive to emulate in killing rebels in record numbers, so we can wipe out the enemy, pin down the enemy, not permit him to reinforce the Cao-Bac-Lang front."

On 16 September the battle of Dong Khe raised the curtain for the campaign.

In the process of carrying out the campaign, messages of operational direction from the comrade Commander-in-Chief and the comrade Chief of the General Staff, along with many messages from the command comrades at other high echelons, were quickly encrypted and sent along to the divisions and regiments, the units participating directly in the campaign and the cooperating theaters.

As a special note, on 30 September and 1 October, when we knew, thanks to enemy messages we intercepted, that the enemy was carrying out a plan to withdraw from Cao Bang and reoccupy Dong Khe, the activity of the cryptographic organizations became more urgent in serving the campaign command's designation of forces to strike the enemy.

Each day, on the average, the Forward Area Cryptographic Section encrypted and decrypted over 100 official messages. Thirty-seven continuous days and nights of decisive combat, and the operational situation between ourselves and the enemy was tense, daily message volume was therefore rather large--the task of encrypting and decrypting messages and handling requirements messages had, in truth, to be quick and exact, especially in the matter of ensuring thorough grasp and accuracy of the campaign CP decision to wipe out two groups, those of [Colonel] LePage and [Colonel] Charton. At 2330 hrs on 5 October 1950, the Cryptographic Section received Order No. 8 signed by the commander and concurrent political commissar of the campaign, Gen. Vo Nguyen Giap, going to the 308th Division, the 174th and 209th Regiments, and the provincial units of Lang Son and Cao Bang, with the precedence indicated on the order to be the highest: "Flash," executing the decision to wipe out the enemy's LePage and Charton groups. The parts concerning the situation and decision were quite clear.

I. Situation and Estimation:

1. The LePage group is currently in Coc Xa and along the Quang Liet mountain range. They are set to seize hill 477 in order to make contact with the Charton group and simultaneously have an element of a Legion parachute battalion go over and occupy Quy Chau hill.

2. The Charton group may follow the Mong Xa road to the Ban Cao-Lan Hai section, then have an element go up and occupy hill 477 to link up with LePage's forces to fight us and save the situation.

3. Tomorrow enemy aircraft will heavily bomb from Coc Xa to Pac Bo, especially hill 533, to provide cover and support and to open the road for the two above groups to pull back to That Khe.

4. Tonight we attack and strive to wipe out the LePage bunch in the Quang Liet region. The combat may extend into tomorrow.

II. Decision of the Campaign CP:

1. Take advantage of the time to wipe out the LePage group before the Charton group closes.

2. Harass, wear down and wipe out in detail the Charton group to create conditions so that after the elimination of the LePage bunch we can consolidate forces to mobilize for a total wipe-out. . . .

The order went on to bring out the specific mission of units in the Quang Liet region, reserve units controlling and threatening Khau Luong and Keo Ai, and the 209th and 174th regiments, diligently controlling and threatening, actively surrounding, pursuing, and wiping out the enemy.

Encrypted, the order resulted in a twenty-part message. The cryptographic organizations and the communication organizations in the campaign meshed together to ensure transmission of the order to the units with timeliness, accuracy, and secrecy.

One illustration of the agile spirit displayed in ensuring command by cryptographic means in the campaign is the initial case in which the cryptographic organization and the communications organization set up the "station flap" [op dai] method, a method of direct exchange between the campaign command and the command of the 308th Division via cryptographic system and radio. This was during the opening of the Border Campaign--our forces had assaulted Dong Khe and the combat situation was becoming critical. Our forces and those of the enemy had become exhausted by mid-day. The troops alternated between movement and attack of the enemy. Combat orders from the division commander at that time had to go for the most part by cryptographic system and radio. Division Commander Vuong Thua Vu called cryptographic and radio up to the CP so that he could personally command the regiments via cryptographic and radio. In accordance with orders from the comrade chief of the division cryptographic section, Vu Van Can, Cdes Phan Tien and Linh Son were selected to go. Under "station flap," if cryptographic had two people, then one would encipher or decipher and one write, or, [in the case of] radio, there would be one operator and two assistants to crank the generator (Ragonout). A command person would sit beside the crypted and personally write or read the message for enciphering. Once the message was encrypted, cryptographic would hand it to radio to send on. If it were an incoming message, the crypted would receive the cipher message from the radio receiver and, once it was decrypted, pass it on to the command person to examine. Cipher messages under these circumstances were usually under ten groups and at urgent precedence, but usually "station flap" meant intense labor by the cryptographers and radio station personnel, having to mobilize to a peak level both for productivity and quality of encrypting and decrypting, when called on -- it was not only a matter of skill in one's specialty, but also a matter of having to settle matters fast.

Many times the comrade commander of the 308th Division, Vuong Thua Vu, and the commander of the 209th Independent Regiment, Le Trong Tan, called cryptographic and radio up to the CP to serve the command function directly. There were also times when comrade General Vo Nguyen Giap contacted Comrade Vuong Thua Vu and Cao Van Khanh via "station flap." Initially, because of a lack of experience, the procedure for encrypting a message called for complete compliance with the rule "indicate the strip, indicate the key," etc. But through the experience of timeliness requirements and the length of cryptograms, combined with the characteristics of the type of technique of the KTA chart-code [luat bang KTA], the comrade crypted developed procedures so that when in "station flap," then they would settle on one type of key so as not to have to indicate the

key, [would] shorten the cryptogram, reduce the formalities, but still maintain secrecy and accuracy, thus speeding up the time for enciphering and deciphering.

The majority of "station flap" messages attained high results--information passed via cryptographic and radio took the shortest route. Command comrades Vuong Thua Vu and Cao Van Khanh saw the cryptopians working under extreme pressure and not only encouraged their cryptographic spirit but were concerned to support them in all matters.

Generally speaking, "station flap" liaison brought into play a high level of action, but there were also instances in which requirements were not met because the cryptographic system had not been set up scientifically - sensibly - the content of the system was still deficient, and the plain/encrypted ratio not high, making encryption and decryption untimely.

Along with the cryptographic organizations in the Cao-Bac-Lang campaign, the cryptographic organs in the cooperating theaters and the fronts behind the enemy served the unit command task well. In Northwest, the cryptographic team of the 148th and 165th regiments served in the plan to distract and strike the enemy, liberating the entire left bank of the Red River within Lao Cai province and part of the right bank of the Red River up to Sa Pa. The cryptographic team of the 246th regiment (in the Trung Dzu theater) ensured unit command in striking paratroopers in Thai Nguyen. The cryptographic organizations of the 304th Division served in actions behind the backs of the enemy, coordinated with regional troops and guerrilla militia in Intersector 3. The cryptographic organization in Binh-Tri-Thien theater ensured command in combat in the "Phan Dinh Phung" campaign, striking the enemy in Quang Binh and Quang Tri and hitting communications on the Hue-Da Nang road. In the Intersector 5 theater, the cryptographic team of the 108th Regiment participated in the "Hoang Dzieu" campaign in northern Quang Nam and the cryptographic team of the 803rd regiment served command in the Khanh Hoa front. In Nam Bo, cryptographic of the units served command in the campaigns of Tra Vinh (Sector 7), Ben Cat (Sector 8) and Long Chau Hau (Sector 9).

On 22 October 1950, the Border Campaign was victorious. We killed and captured 8,000 of the enemy and liberated a stretch of the border 750 km long, with 350,000 people. "The Border Campaign was our first large-scale offensive campaign--a mobile striking campaign, hitting and eliminating the enemy in a first-class manner, achieving the highest combat results for our army and our people."*

Exactly as Uncle Ho said, "The victory in Cao-Bac-Lang is a victory shared by the soldiers of the entire nation." The cryptographic cadre and soldiers played a fitting part of their own in that victory.

The campaign cryptographic organizations diligently surmounted obstacles in developing and arranging a cryptographic network that was timely and accurate and that ensured the task of encryption and decryption with a high volume of message traffic, in combat conditions of continuous movement, requiring a high degree of timeliness. Each unit accomplished its mission; there were no major errors to interfere with command guidance. Summarizing the campaign, Uncle Ho recalled some points that needed corrective action, among them the matter of ensuring secrecy. At the campaign recapitulation conference (27 November 1950), Cde Commander-in-Chief Vo Nguyen Giap stated clearly: "People in command are not paying sufficient attention to the organization and use of radio and cryptographic--radio and cryptographic are being placed distant from command personnel (notwithstanding the directives for command levels and Intersectors that radio and cryptographic must be placed near command personnel). But these directives are not being adequately grasped and carried out in the units, so we have orders by radio not reaching command personnel until a day later."

Through service in the campaign, the army cryptographic branch drew valuable experience in organizing to ensure command.

Cryptographic organizations at the various levels had to thoroughly grasp the mission situation, as to campaign and combat intentions; had to prepare the types of cryptographic materials and plan for employment accordingly; had to ensure that the resources for encrypting and decrypting were concentrated on contents that met the high estimates of timeliness; constantly strove for close cooperation with the operations organizations and the communications organizations in the process of campaign preparation and implementation, aiming at ensuring firm, solid grasp continuously for command, especially when the unfolding situation is urgent. The process of preparation must have anticipated developing situations, must have prepared conditions to ensure a positive, proactive method when the requirement is levied.

* "When the smoke cleared, the French had suffered their greatest colonial defeat since Montcalm . . . died at Quebec." Bernard B. Fall, *Street Without Joy: Indochina at War, 1946-1954*. Harrisburg, PA: The Stackpole Company, 1961, 28--Tr/Ed.

Also through the Border Campaign we came to see clearly that we had to have thoroughly penetrating creativity in organizational guidance to execute the task of encrypting and decrypting, following the flow of outgoing and incoming messages in an exact manner. When the scale of the campaign and the form of operations changed, then cryptographic organizations had to take the initiative in concert with radio and with upper and lower [echelons] to ensure that command requirements were fully grasped in every situation; had to quickly come up with and put forward ideas for the command people when impediments were encountered in the specialty mission and in task relationships, in order to speedily discern methods of solution and avoid situations of being late and causing adverse influences for combat.

From the standpoint of technique, there had to be types of systems suitable to meet the requirements of mobile operations, compact with respect to form and quantity, adequate with respect to compilation of code content, reliable with respect to degree of security, etc.

In the task of deception and the timely breaking out of the contents of enemy messages, the cryptographic organizations had notable contributions. This was a new task in serving to ensure victory for the campaign. And the enemy also had to recognize their failure in this respect.

Through the Border Campaign, the cryptographic branch affirmed its maturity, meeting the ever more demanding requirements of the combat mission outstandingly, serving the army in increasingly larger and successive campaigns.

The significance of the Border Campaign victory is very great in the history of the resistance of our people against the French colonialists. The gates of the northern border were opened, to provide access to democratic and socialist nations and create favorable conditions to win international assistance from friends everywhere in the five continents. Right after the Border victory, the High Command decided to designate a group of cryptographic cadre to go over to China to study technique and cryptographic professionalism. The group had forty-three comrades with Cde Hoang Van Dong, Chief of the General Staff Cryptographic Bureau, as chief of the group and Cde Nguyen Trieu as political assistant. Cde Nguyen Dzuy Phe was designated to replace Cde Hoang Van Dong in charge of the Cryptographic Bureau. The group studied in China until May 1951, then returned home.

THE CRYPTOGRAPHIC TASK IN THE VOLUNTEER UNITS FIGHTING ON LAOTIAN AND CAMBODIAN SOIL

When the sounds of gunfire erupted nationwide, the Indochinese Communist Party Central directed establishment of the Western Front, consisting of the Cambodian Front and the Laotian Front, to help the Cambodian and Laotian revolutions, together with Viet-Nam's, to implement the resistance against the French colonialists and gain independence. In order to ensure command secrecy for our volunteer forces and the friends, active on the battlefields of Cambodia and Laos, the volunteer units organized a

cryptographic system [he thong]. Because communication [giao thong] conditions were difficult and activity was in the heart of the enemy, initially the comrades in the Western Front researched and compiled for themselves cryptographic systems for liaison to ensure command secrecy between the Nam Bo Sector [Xu] Committee, the Overseas Vietnamese Party HQ Special Committee, and the Western Front.

The cryptographic systems at this time were still simple, using one-time substitution: each message was enciphered with its own key, which, once enciphered, was immediately destroyed. The cryptographers used four open-source publications to derive [tao lap] cipher key:

- The 2 August 1945 Declaration of Independence,
- A selection of the literary classic, *Kieu*,
- Dimitrov's 1947 report (in translation),**
- Cde Truong Chinh's "Protracted Struggle But Sure Victory"

In January 1949, the Central Cadre Conference meeting from the 14th to the 18th issued a resolution concerning the military mission, namely, the opening of the Lao-Cambodian Front. Per a directive from the Central Standing Committee, Intersector 4, 5, and Nam Bo were themselves to organize and bring up to strength armed propaganda units to expand activities to establish political bases in the sectors of Laos and Cambodia.

As a result, ensuring command secrecy for the directives on activities to assist the friends in Laos and Cambodia was unified under the cryptographic organizations at Intersectors 4 and 5 and the Nam Bo Command to directly organize and arrange cryptographic nets for the volunteer units going over to be active in aiding the friends.

In Cambodia, the Southwest Liberation Committee had been established in March 1948. By the end of 1949, the base sectors had connected up with one another, and the liberated region of Cambodia had expanded. In April 1950, according to the policy of the Agents' [can su] Committee of the Cambodian Nation-Wide Party, the Khmer Issarak Front was established, creating the Cambodian People's Armed Forces. The Vietnamese Volunteer Army units increased their assistance to the friends in building and in fighting, following instructions from the Central Standing Committee of the Indochinese Communist Party.

** Georgi Dimitrov (1882-1949) - Bulgarian Communist; secretary general of the COMINTERN, 1935-43; premier of Bulgaria, 1946-1949. Reference is presumably to his presentation at the organization meeting of the COMINTERN in September 1947. Tr./ed.

At that time, the cryptographic organizations of the Vietnamese Volunteer Army started to expand in Cambodia. The cryptographic organization in the All-Cambodia Agents' Committee, under the charge of Cde Cuong, concurrently was responsible for cryptography for the Agents' Committee of East Cambodia. Cde Oanh was in charge in the Northwest Agents' Committee, and for the Southwest Agents' Committee, Cde Kha was in charge of cryptography.

In the Volunteer Army battalions, there were one to two cryptographic personnel performing the mission.

The cryptographic organizations of the Volunteer Army served command leadership in executing the missions and tasks of assisting the friends in building bases, building forces, and armed propaganda activities; transporting supplies and weaponry, etc., participating in the development of the friends' resistance forces.

From 1950 on, the cryptographic organization of the Volunteer Army in Cambodia received help from the Nam Bo HQ¹⁹ Cryptographic Section, with respect to people and cryptographic material as well as task experience, and started to receive professional guidance from high echelon cryptographic organizations.

In Laos, in 1948 the task assault units and the Lao-Viet armed propaganda units expanded, active into Sam Neua, Xieng Khoang, and the provinces of Central Laos. In September 1949 the Lower Laos base sector was established. By the beginning of 1950, many resistance base sectors had taken shape, from Upper Laos and Central Laos to Lower Laos. The Lao armed forces were consolidated and expanded further, coordinating combat closely with the Vietnamese armed forces.

The Cryptographic Bureau of the General Staff, cryptographic organizations of Intersectors 10, 4, and 5, and of the Vietnamese volunteer army units served efficiently for command guidance, participating in helping the Laotian revolution expand.

In December 1949, we opened the Song Ma Campaign. The Cryptographic Section of the Northwest Front, cryptographic teams of the 138th and 148th regiments, and other units did a good job of ensuring for our units coordination with the friends' forces wiping out the enemy at Xieng Kho, breaking through the enemy's Song Ma line from Muong Sam to Sop Hao, enlarging the liberated area by more than 2,000 square kilometers, with 10,000 people.

In February 1950, the Lao Patriotic Front (Neo Lao Hak Sat) was established and officially organized the Lao People's Armed Forces in Upper Laos. The Lao Issarak armed propaganda units were zealously active in expanding and consolidating guerrilla bases and liberated areas. At the same time "Westward Ho" [Tay tien] army groups of the People's Army of Viet Nam crossed over to coordinate activity in accordance with an agreement between ourselves and the friends. Based on the mission requirements of each Intersector and the concrete guidance of the General Staff Cryptographic Bureau, the Cryptographic Sections of Intersectors 4, 5, and 10 organized cryptographic elements to go

and perform the mission in the Westward Ho units, comprising the cryptographic teams of Group 80 in Sam Neua, Group 81 in Xieng Khoang, Group 83 in Vientiane, Group 101 in Lower Laos, and Group 102 in Central Laos. Also in 1950 we organized a task group to help our Lao friends, with the name Group 100. The Cryptographic Section of Group 100 was established with Comrade Nguyen Ba Zung in charge, and with responsibility for general guidance in the cryptographic task, serving the Vietnamese volunteer units and helping our Lao friends with the cryptographic tasks.

Notes

1. *Military Documents of the Party*. Hanoi: PAVN Publishing House, 1976, vol. 2, 250.
2. Minutes of the Bac Bo [Tonkin] conference of 14 September 1947, quoted in the *History of the General Staff*, 119.
3. Comrade Ta went to Central Party cryptographic; Comrade Nhan went to Ministry of Internal Affairs cryptographic; Comrade Dzuyet went to cryptographic at the Prime Minister's office.
4. Intersector 1 report for 1948.
5. Extract from the report of the Intersector 1 Cryptographic Section at the Sixth Army-wide Cryptographic Conference.
6. Intersector 3 report for 1948.
7. Cde Nguyen Van Dzanh became an augmentee to go down and work as deputy chief of the Intersector Cryptographic Section. Afterward, he was appointed to go down and head the Sector 6 Cryptographic Section.
8. Report of the Cryptographic Bureau at the Sixth Army-Wide Conference.
9. Ibid.
10. *History of the General Staff*.
11. The major parts of "Mat ma dai cuong" were
 1. Fundamentals of cryptography
 2. Substitution
 3. Transposition
 4. Make-up and superencipherment
 5. Conclusion.The book had an appendix with a list of terms used in the book and their French equivalents. This book of 130 pages was printed in 910 copies (110 copies on good paper).
12. Extract from the introduction to the book *The Use of Cryptosystems*, published by the Ministry of National Defense in 1949, 2-3.
13. Printed 31 March 1949. Contained eight major problems, namely:
 1. Why one must use cryptographic systems
 2. Under what circumstances are cryptographic systems used?
 3. How are cryptographic systems safeguarded?
 4. Safeguarding cryptographic systems with respect to specialist aspects
 5. Requesting repeats when cryptograms cannot be decrypted

6. On the cryptogram log and the duplicate of the secret message
 7. Twenty violations of cryptographic rules
 8. How are violations to be disciplined?
14. Extract from the introduction to the book *The Use of Cryptosystems*, published by the Ministry of National Defense in 1949, 2,3.
15. *History of the General Staff*, 193.
16. Afterward, the cryptographic element in the General Political Directorate merged with the General Staff Cryptographic Bureau. Cde Nguyen Chu was appointed chief of the Cryptographic Section of the General Directorate of Supply. Cde Nguyen Dac Ho was placed in charge of military transportation cryptographic.
17. Consisting of comrades
- Le Thanh Hai, political commissar of the General Staff Cryptographic Bureau; Cde Nguyen Trieu; Cde Le Van Chuong; Cde Le Van Bang
18. *History of the Vietnamese Communist Party*, first draft, 1920-1954. Hanoi: Truth Publishing House, 1984, vol. 1, 602.
19. In 1952, the Eastern Region Sub-intersector Cryptographic Section assigned three Comrades, Le Dzan, Nguyen Bao, and Nguyen Tan Nhon to go over and reinforce the Volunteer Army Cryptographic Section of East Cambodia.

Chapter Three

The Army Cryptographic Branch Continues to Build and Develop in Every Aspect, Serving Command Leadership, Developing Guerrilla Warfare and Stepping Up Mobilization for Progress into War of Movement (1951-1953)

**CHANGE OF NAME TO ARMY ESSENTIAL MATTERS BRANCH;
CONTINUING TO BUILD AND DEVELOP,
EXPANDING ORGANIZATIONALLY;
RAISING CRYPTOGRAPHIC TECHNIQUE**

After the Border defeat, the French colonialists fell deeper into a situation of perplexity and stalemate; therefore, they had to rely on the American imperialists to continue the war of aggression in Indochina.

Getting a shot in the arm by America, the French colonial gang consolidated and concentrated their pacification forces in an urgent pullback from the Tonkin delta to effect a policy of "taking war to breed war, using Vietnamese to beat Vietnamese" and prepare conditions for a counteroffensive to regain the strategic initiative. This was an all-out effort on the part of the French colonialists and the American interventionists.

In a nationwide atmosphere of elation after the Border victory, the second national congress of party representatives convened in February 1951. Resolutions of the congress brought out the mission of stepping up the resistance to achieve total victory. We had to build up larger armed forces—resolve to defeat every one of the enemy's warfare schemes. Implementing the resolutions of the congress, the Central Party promptly decided to reorganize the troops, striving to open a campaign aimed at sapping enemy strength, spreading guerrilla warfare, destroying the enemy's plan to consolidate his forces and pacify the [Red River] Delta, holding fast to our correct course of action in the strategic initiative in the Bac Bo [Tonkin] theater.

Executing the Central Party's decision, the forces of the Vietnamese National Army were massed to build additional main force divisions [dai doan], while at the same time opening a campaign to strike into the enemy's defensive perimeter in the midland and the Delta.

Faced with the requirements of the new mission, with respect to the building and operations of our armed forces, and implementing instructions from the General Staff and General Political Directorate, the army cryptographic branch diligently strengthened and built itself up, with respect to organization, raising the level of cryptographic technique for orderly construction and task methodology in order to meet the requirements of the new phase.

In February 1951, the eighth army-wide cryptographic conference was organized in Viet Bac. The conference examined the task of recent years and issued mission direction for the cryptographic task in coming years. Cde Hoang Van Thai, Chief of the General Staff, visited and spoke at the conference.

Based on real-world experience, the conference clearly determined the matter of professional instruction for army cryptographic organizations, namely, "we must latch on to a hierarchical branch system, instructions from above penetrating below, 'below' understanding 'above,' in order to fulfill the tasks swiftly, ensuring results." Wishing for successful outcome of this provision, "we must carry out the building and consolidation of the cryptographic organization to be sensible, scientific, unified, close," conforming to the organizational principles of the army; must build the specific responsibilities of the army cryptographic organization at the various levels, build a team spirit in the task between cryptographic organizations and people in command, communications organizations, and cryptographic organizations of the Party, government, and Public Security; build a system of administration for cryptographic cadre and personnel, raise the sense of responsibility, enthusiasm for the task, love of branch, love of skill in accomplishing good results in the specialty mission, etc. Resolutions of the eighth army-wide cryptographic conference also dealt with the matter of international obligation vis-a-vis Laos and Cambodia.

The conference also returned a proposal, and HQ made the decision to change the name of the army cryptographic branch to the army Essential Matters [co yeu] branch.

After the eighth army-wide cryptographic conference, cryptographic ["essential matters"] organizations at the various echelons in the army were unified and placed directly subordinate to the staff organizations at the various levels, under the direct control of the chief of staff. Tables of organization were gradually squared away and strength, dependent on the mission requirements of each unit. Responsibilities and mission of cryptographic organizations at the various echelons, from General Staff Cryptographic Bureau down to the cryptographic organizations at the level of regiment and provincial unit, and the mission of each specialized and responsible element--research, code compilation, message encrypting and decrypting, training and development--also in stages were built and fully worked out. The system for administering cadre and personnel, first being the system, procedures, regulations for selection, development and use, or for some time to perform the cryptographic task, also was promulgated and more closely implemented than before. Each relationship between the cryptographic organization and counterpart organizations was gradually squared away.

The General Staff Cryptographic Bureau was given an additional boost: Returning from study in China, Cde Hoang Van Dong resumed the duty of bureau chief, with Cde Nguyen Trieu the political assistant. Organizational structure of the bureau was changed to

- Campaign Cryptographic Section, with bureau deputy chief Nguyen Chanh Can as its Chief

- Encrypting-Decrypting Section, under Cde Hoang Manh Tuan
- Technique Research Section, under Cde Dinh Loan Thuyen
- Organization and Education Section, under Cde Le Van Bang
- Printing Team, with Cde Nguyen Tuan Nhan as team chief.

Cryptographic organizations in the Intersectors, divisions, regiments, provincial units, etc., also were matters of concern in the guidance for building. Cryptographic organizations distant from Central were unable to attend the eighth army-wide cryptographic conference, due to wartime conditions, so early in 1951 the General Staff assigned a cadre group under Cde Le Dinh Y, with Cdes Ho Si Dzi and Nguyen Tuan, to go down to Intersector 5 and Nam Bo to organize and guide the employment of cryptography in accordance with the new system and to see to it that the conference resolutions were fully grasped.

In May 1951, the Intersector 5 Cryptographic Section organized an intersector-wide cryptographic conference. It examined the research task situation, grasped the resolutions of the eighth army-wide cryptographic conference, and issued mission and cryptographic task measures for the Intersector.

In August 1951, Y's group reached Nam Bo. Because of task conditions, going and coming was difficult and dangerous, and it was urgent that [cryptographic capability] be kept together to serve command, but Nam Bo organized to comprehend thoroughly the import of the resolutions for the entire branch. Afterward, Cde Le Dinh Y received orders to remain in Nam Bo in charge of cryptographic technique training research for the Cryptographic Section of HQ, Nam Bo.

Also in 1951, the General Staff augmented Intersector 5 and Nam Bo with a number of experienced cryptographic cadre in order to increase the cryptographic organizations of their units.

So as to ensure that cryptographic organization at the various echelons was firmly secure, the General Political Directorate and the General Staff decided that Party membership would be a criterion in the selection of people for the cryptographic task, and instructed the commissars at the various echelons to take positive measures to educate and foster non-Party-member cryptographers, arranging for conditions to help them all train for entrance into the Party. In those instances in which aptitude for entry into the Party was lacking (or there were Party members lacking the conditions for the cryptographic task), they were to be transferred to a different task for which they were suited.

Along with the matter of strengthening organizationally, the General Political Directorate instructed the commissars at the various echelons and the unit commanders to attach special importance to leadership and ideological education for cryptographic cadre and personnel subordinate to them, to build responsibility vis-a-vis the specialty mission,

raising enthusiasm in the task and clearly aiming at lengthy service in the army cryptographic branch.

With this sort of spirit, documents of the eighth army-wide cryptographic conference determined: "The cryptographic branch is an important branch in the service of the army, serving in the cause of revolution. . . . Viewed in this manner, we can endure long service for the cryptographic branch, possibly working five, ten, or twenty years and more in the cryptographic branch Viewed in this manner, we can straighten out our work, the conduct of people, in order to be worthy of performing the important task which has been entrusted to us by the association We must be of one mind from top down, so that each cryptographic person as one, each cadre and personnel as one--one and all--must be unified in outlook and ideology and also with respect to style of work, in order to serve the revolution--to serve the people: Unified in thought and viewpoint this way in order to create conditions to improve technique and speed along the development of the war."

The ideological viewpoint from above was regularly perceived by the cryptographic organizations at the various levels, educated in the stages of reeducation and troop reorganization and in internal life, so that it created a change with respect to perception and ideology for the cadre and personnel in the branch.

In the Intersectors and divisions, the task of education and ideological leadership for the cryptographic cadre and personnel was taken very seriously by the leadership and command comrades. In Intersector 5, Cde Nguyen Chanh, political commissar at Intersector HQ, got personally involved in educating and mobilizing the intersector cryptographic cadre and personnel and in determining the sense of responsibility vis-a-vis the mission, the profession, while at the same time deciding to augment the political cadre in order to build the intersector Cryptographic Section into a strong and stable unit. In Nam Bo, the cryptographic organizations also received serious consideration by the unit commands in their building-up. The Eastern Region Sector Committee assigned a sector current affairs committee member comrade to personally direct the political and professional reeducation for the cryptographic cadre and personnel.

In 1951, the army cryptographic branch also organized coordinated studies concerning the Party's revolutionary line and resistance line, its decision concerning the building of armed forces with the stages of professional reeducation, aimed at bringing into play the very essence of a people's army, a revolutionary army.

The cryptographic cadre study and training movement from 1951 spread far and wide, creating a seething momentum for the task. Cryptographic cadre and personnel regularly turned their thoughts to study and self-improvement, carrying out criticism and self-criticism, united to help one another in advancement. In this way, class position and sense of responsibility vis-a-vis the specialty mission of the cryptographic cadre and personnel clearly moved forward, most obviously in the matter of fixing responsibilities with respect to the specialty mission, building professionalism, and a sense of responsibility.

The Army Cryptographic School was officially established in accordance with High Command decision. On 14 May 1951, Comrade Nguyen Chi Thanh, head of the General

Political Directorate, personally assigned responsibility to a board of governors, comprising comrades Nguyen Dzuy Phe as director, Pham Tu Cap as deputy director, Vo Van Nhuong as the political assistant. The subject-matter-expert instructors were comrades Hoang Quyen, Vu Ngoc Hai, and Nguyen Mai Hanh. In order to meet the requirement for the number of cadre and personnel before the expansion of organization and technique for the cryptographic branch, the General Staff decided to open a class of instruction in the new technique, with the designator "C.40." The General Staff gave HQ, Intersector 4 the mission of organization, enrollment, and taking care of the logistics for the school. Through a selection process, considering all aspects of politics, ideology, education, and health, 250 students were selected from the provinces of Thanh Hoa, Nghe An, and Ha Tinh, from the Ground Forces Officers' School, and from the Intersector 4 Politico-Military School.

On 2 September 1951, opening day exercises were organized at the town hall of Hung Dao, Hung Nguyen district, Nghe An province. Attending were Cde Le Nam Thang, representative of the Sector Committee and HQ, Intersector 4, and Cde Nguyen Dinh Tung, responsible for political matters in Intersector 4.

The students were organized into four platoons. Squad cadre were taken from the students at the Ground Forces Officers' School and the Intersector 4 Politico-Military School. Platoon political personnel were taken from the students who had political assignments back in their units. In order to ensure secrecy and safety, the school regularly moved to training locations in the Nghe An province area of responsibility. Besides content that fostered the specialty profession, the curriculum of political study was also regarded with due care and attention, its content stressing "strive for self-improvement in ideology; train in the virtues of cryptographers who are party members" and prepare to accept and totally accomplish each mission entrusted by the Party. Students wrote resolute letters fixing responsibilities vis-a-vis the mission, as assigned after class sessions.

As for specialty content, compared with the study of technique KTA, training in technique KTB was much more complex, thus the acceptance of theory and the practice of encrypting and decrypting required the spending of time and labor, and mental power, before becoming proficient, especially in the basic subjects, such as cryptographic subtraction, memorization study, combined encryption-decryption, etc.

The movement to emulate teaching, study, cultural life and physical education - sports - to raise self-improvement and improve life--also boiled up regularly through mobilization.

The aspects of the task with respect to ensuring secrecy, guarding against traitors, and carrying out propaganda among the people were carried out seriously and strictly. The school organized sessions of labor to help the people and to participate in literary and artistic performances in the countryside. Executive committees, government, and people of the area strove to help out the school. Many mothers, such as Mother Dat in the village of Mau Lam, volunteered to give up their home for the students to have a place to study,

mobilizing the women and children of the countryside to help out with sustenance and to take turns cooking for the students. Mother Dat's copper pot, used to cook for the students, was turned into an emotion-filled keepsake between the school and the people of the region, and continues to be retained by the school.

Building became an orderly routine - style of work, professional tasks, followed a regular direction, unified, taking into consideration the requirements for building and implementing in a positive manner the army's combat requirements. In order to build a basic foundation and get professional tasks into an orderly routine, in May 1951 the army cryptographic branch wrote up and the General Staff promulgated decisions with respect to

- The tasks of research, production, allocation for use, and maintenance of cryptographic materials.
- The tasks of encrypting and decrypting.
- The tasks of ensuring cryptographic security and the administration of secret messages.
- The meshing of tasks between the cryptographic organization and the commander.
- The important meshing of tasks with the communications and operations organizations.

In August 1951, the General Staff promulgated a reeducation document on staff professionalism, which included (Part B) relatively concrete regulations concerning task relations between the various echelons and the cryptographic organizations, principally in the matter of handling secret messages, requirements for education to promote a spirit of vigilance, security consciousness, and implementing specialty rules of conduct for cryptographic cadre and personnel. In Nam Bo, the Sector Committee and the HQ of the sectors issued regulations that cryptographic cadre and personnel of the various units would not be given leave to go into enemy rear areas. In Sector 4, the Intersector Committee and Intersector HQ instructed organizations having interconnected coordination with cryptographic organizations in the administration of cryptographic cadre and personnel to take the initiative in stopping and promptly settling negative occurrences that took place.

With a spirit of revolutionary vigilance, the army cryptographic branch had to take the initiative in diligently countering every one of the enemy's subversive plots and tricks. With respect to increasing the building of organization, the army cryptographic branch had to strive to raise the level of cryptographic technique in order to ensure secrecy for leadership and command under conditions in which the cryptographic liaison net was spread widely and deeply, the volume of cipher messages sent on the air had greatly increased, and the enemy was making every effort to collect cryptanalytic information in order to learn our cryptographic secrets.

The task of research to improve and enhance cryptographic technique in the army during this period had mobilized to produce a wave, arousing the ingenuity of all of the cadre and personnel in the branch. Many improved methods, enhancing the level of security of the code charts, were implemented, and there was research into the thorough development of ways of connecting up the Vietnamese language in the code charts, applying many methods of connecting up the language into one clever, creative method. There were places that concurrently used two methods of connecting up the language: In Nam Bo, the plain chart was filled out with clusters of syllables and phrase particles (called compound words) consistent with command vocabulary. There were places that used an auxiliary chart to contain compound words, places that arranged two plain elements in one cell and used many charts at a time, with general charts, special charts, charts for immediate use, and reserve charts. In form of compilation, the code charts were put in order, presenting a more scientific method of encrypting and decrypting that was favorable to speed and precision in conditions of mobile combat. With the above advances, the quantity of plain elements in the code charts increased noticeably, shortening the encrypting and decrypting of messages, speeding up message handling.

Together with the improvement of the plain chart [bang ro], the secret strip [bang mat] also was changed, in order to raise the capability of the cipher key to ensure secrecy. The secret strip was improved by many rows, many columns, or under the form of a set of strips, using an abridged set of letters to arrange cipher letters. The period of moving the short strip was irregular, using many strips together at one time. All of these methods of technique contributed to "frequency flattening," implementing nonrepeating [khong trung lap] substitution.

There was also concern for research – the compilation of cryptographic theory. The Nam Bo Cryptographic Section had compiled "The Theory of the Research Task and the Production of Cryptography." Although we had made strides, still we were immature with respect to other nations, because we had not inherited a legacy from the past, as had other nations, because we had no one skilled and professionally trained. Beforehand, the enemy had many centuries of experience – they had scholars in research, they had extremely clever compilers – our progress with respect to cryptography was not yet really remarkable. For these reasons, we could afford to be subjective. If we wanted the resistance to win unification and independence quickly to achieve a better outcome, if we wanted that success to be a solid building block in the foundation of world peace, we had to exert every effort to make our cryptography progress much further, so that we could catch up with advanced nations, etc.

Many forms of the KTA-type code chart differed from each other: Best known were the four-element, such as DzC-4, of the General Staff Cryptographic Bureau; the four-element of Nam Bo Cryptographic Section, that combined substitution with transposition; the three-element of Intersector 5; the five-element of Nam Bo; the six-element of the 320th Division. . . Generally speaking, the forms of the types of system were rich and dynamic. Super encryption was also researched and implemented. In Nam Bo's book, *The Theory of the Research Task and the Production of Cryptography*, superencryption was touched upon:

"... superencipherment is a method of using many methods of encrypting messages piled on top of each other. . . the method of encrypting messages by simple encipherment is inadequate to ensure the contents of the message --on the one hand, the groups of characters replaced in each system have limits; on the other, the volume of cryptograms sent in space and time accumulates. Therefore, the enemy has a rather rich quantity of materials to research and cryptanalyze our systems. . . ." "Superencipherment takes a lot of time and care on the part of cryptographers, but faced with requisites of the work, the cryptographer cannot flinch. . . ."

The cipher rules to implement superencipherment were applied as follows: "substitution of the Vietnamese language chart combined with advanced Playfair substitution," "chart substitution combined with transposition," "chart substitution combined with random key. . ." - these cipher rules were only beginning to be used in the larger units in order to ensure the secrecy of [message] contents [involving] strategy and campaigns.

Thus through improved processes, the code chart developed to a high level. Nevertheless, analyzed more deeply, it must be appreciated that, scientifically, a chart code has numerous weaknesses that cannot be eliminated in implementation--the rule of frequency, how the language is put together, the fixed form of the chart. Concurrent with the improvement and raising of the level of KTA, from April 1951, the General Staff Cryptographic Bureau pushed research to organize production of a type of cryptographic--technique in which the encryption method relied upon a combination of code book ["cryptographic dictionary"] and mixed key, designated KTB.

This is a type of cryptographic technique of high grade, but with many complicated requirements with respect to production and design. The Technique Research element, newly placed under Cde Nguyen Dzong Hoa, overcame difficulties in searching out the frequency of command terminology in order to compile the code book. The demands of random key production had to be placed under a criterion of high randomness, during a time in which we had no calculating machines and had to use manual methods. Research into the compilation of codebooks and setting out a formula for cryptographic key production were technically researched with respect to content and method. The work had to be done in a very meticulous way; the labor expended was very time-intensive. After many months wrapped up in the work of the research team, code books and random key had been settled and production organized.

The comrade chief of the Cryptographic Bureau of the General Staff, together with the comrade chief of the Technique Research Section, carried out a cautious review and appraisal of the grade of security afforded by KTB, after which they jointly proposed that the General Staff permit its use in some large units. In December 1951 the General Staff decided on test-use of technique KTB on the mainline net between the High Command and the 308th Division.

The appearance of cryptographic technique KTB marked a new stage in the evolution of technique on the part of the army cryptographic branch. This was a type of technique that effected the substitution of plain and cipher in a largely random way.

At the beginning of 1952, the ninth army-wide cryptographic conference convened. Among the resolutions of the conference, a part spoke to the course of the mission in coming years, stressing "step up the training, reeducation and ideology to raise the quality of cryptographic cadre and party members; improve technique in accordance with the principles of secrecy, accuracy, and speed; strengthen organization; grasp firmly the guidance concerning the main theater of war; progress in unifying guidance on the entire theater of war," etc.

Comrade Nguyen Chi Thanh visited and addressed the conference. He said, "Comrades engaged in cryptographic work are anonymous warriors. But 'real talent needs no publicity.' You comrades must strive to give your very lives because of the revolutionary work of class and party, because of the work of resistance of the people. You comrades must strive to exchange revolutionary virtues and combat individualism in order to be worthy of the Party's trust."

By 1952 our army had formed six main force infantry divisions and one artillery-engineer [cong phao] division. Each intersector had two main force regiments. Nam Bo had four. The cryptographic organization in the divisions and regiments was boosted a notch. The use of KTB was expanded by the General Staff to the 304th, 312th, 316, and 320th divisions to enable direct contact with the High Command.

In April 1952, the General Staff Cryptographic Bureau opened the "Song Da" class to foster the new technique for a number of cadre in charge of Intersector and division cryptographic organizations in Bac Bo [Tonkin] to become the nucleus for training and organizing the use of the new technique in the Intersectors and divisions.

In June 1952, C.40, the class of training in the new technique, concluded. More than 200 student graduates were parceled out to the units to extend the use of the new technique.

Also in 1952, classes Quang Trung 1, Quang Trung 2, and Quang Trung 3 in turn were opened, training many additional cryptographic cadre and personnel to augment the units. The General Staff posted a number of cadre from the Cryptographic Bureau down to Intersector 5 and Nam Bo to help build the cryptographic organizations to the south solidly. A cadre group of three comrades - Luong Dzan, Nguyen Tat Giang, and Vu Dinh Son, with Cde Luong Dzan as chief - went down to Intersector 5 and Nam Bo to communicate the resolutions of the ninth nationwide cryptographic conference and to help the units organize political and professional studies for cryptographic cadre and personnel. After accomplishing this mission, Cde Luong Dzan was assigned as chief of the Western Area Subsector Cryptographic Section and Cdes Nguyen Tat Giang and Vu Dinh Son augmented the Nam Bo cryptographic section.

Apart from the increase by Central's cryptographic cadre, the Eastern Area Sector Committee issued instructions for the units to take note and obtain a number of Party members of worker and peasant stock and children of cadre to go and perform the cryptographic task at various levels. The Sector Committee also instructed the units to increase the educational task, the administration of cryptographic cadre and personnel, and to ensure that cryptographic organization was pure and solid.

Vis-a-vis the cryptographic organizations in the Bac Bo [Tonkin] theater, the General Staff Cryptographic Bureau attached special importance to increasing instructions for professionalism, organizing cadre groups to go down and provide on-the-spot assistance. In August 1952, Cdes Do Lac and Nguyen Nhien were sent to Intersector 3 and the 304th Division and the 320th Division. At the end of 1952, Cde Hoang Quyen was sent to the 325th Division in Intersector 4. Task groups helped the Intersector and division cryptographic sections organize political and professional training conferences and opened classes to develop new cryptographic cadre and personnel.

As a result, in the two years from 1951 through 1952, the cryptographic branch positively took the initiative to build and expand in every aspect - political ideology, organization, technique - and to direct the orderly building of the professional task, meeting the requirement to serve command leadership in conditions of very heavily armed forces and successive large campaigns.

SERVING COMMAND LEADERSHIP IN DEFEATING THE ENEMY'S URGENT PACIFICATION SCHEMES AND DECISIVE COUNTEROFFENSIVE

Right after the Border Campaign, at the end of 1950, the General Staff Cryptographic Bureau received orders from the Chief of Staff to prepare for the Trung Dzu Campaign (the Tran Hung Dao Campaign on the fields of Vinh Yen and Phuc Yen). The objective of the campaign aimed at continuing to wipe out enemy strength, expanding bases, developing guerrilla warfare to destroy enemy schemes to strengthen their forces and participation, and grasping the strategic initiative in the Bac Bo theater. The bureau laid out a plan to rectify and augment cadre and personnel, anticipate the organization of liaison nets, and arrange cryptographic material for the units participating in the campaign, consisting of the 308th and 312th divisions and the 36th, 88th, 102nd, 209th, and 141st regiments subordinate to the two divisions. Liaison nets to serve the Forward Area Supply Council, under the charge of the General Directorate of Supply, and the reconnaissance net, under the charge of the Intelligence Directorate's [Cuc Tinh bao] cryptographic, were also developed.

Drawing on the experience of the Border campaign, in this campaign we anticipated unfolding situations, organized to arrange for cryptonets to serve both units directly involved in the campaign and those on the sidelines - units in direct contact, skip-echelon, and cooperating in a relatively logical way.

The campaign began on 25 December 1950 and ended on 17 January 1951.

In the process of implementing the campaign, as it was opening the enemy launched a raid on Xuan Trach. The radio station of the campaign CP was unable to make contact with the 312th Division because the set was placed at the foot of Tam Dao mountain. Communications and cryptographic pooled their efforts to organize liaison for timely envelopment, moving the net via basic CPs on the other side in order to relay to the 312th Division. The campaign Forward Area Cryptographic Section, because it had taken precautions from the outset, had prepared and had cryptographic systems ready, so when this need arose to work this way, command was ensured throughout. Thus the 312th Division blocked and struck the enemy promptly, wiping out in its entirety the 24th North African battalion at Xuan Trach. This was also an experience in organization and implementation of the cryptographic task in a campaign: When the normal communications net between two units was interrupted, they could go via a third unit as intermediary in order to regain liaison, and, if one wanted to be able to do that in the plan that had been prepared, one had to have anticipated before the requirement came down.

However, in the conference summarizing phase one of the campaign, organized at the front on 3 January 1951, the campaign CP repeatedly called attention to the phenomenon of units writing reports but not checking the supervision and speeding up of transmission; therefore reporting messages were still continuing to sit at the station. The CP also observed: "One matter that must be paid attention to is the problem of maintaining secrecy when using radio and cryptography, when writing messages, copying messages, sending messages. . . cryptographic security is still a weakness."

In reviewing service to the campaign this time, the Cryptographic Bureau of the General Staff stressed, in addition to the value of planning and preparation, arranging cryptographic liaison nets, figuring out beforehand the circumstances calling for direct liaison, skip echelon, pooling and splitting up nets, moving nets, relaying via an intermediary--one very important requirement, namely, to track outgoing and incoming message flow; to settle each relationship between the cryptographic organization and the communications organization, operations, and command personnel tightly and promptly, regularly examining and digging out problems in the sphere of responsibility and mission of the cryptographic organization, along with interconnected problems of ensuring command requirements, and bringing them to the attention of command personnel for resolution.

The Trung Dzu campaign had just concluded when, on 20 March 1951, we opened the Hoang Hoa Tham campaign. Participating forces consisting of the regiments of the 308th and 312th divisions struck the enemy's defensive perimeter on Route 18, from Pha Lai to Uong Bi. After a series of indecisive battles, the campaign was concluded on 7 April 1951. The cryptographic forces of the campaign command and the divisions were diligent in service, but radio contact with the regiments still caused some hitches, and we missed a good opportunity to exterminate the enemy fleeing from Uong Bi and failed to get a timely order to the 36th Regiment to postpone its attack when information was received that the enemy had reinforced Mao Khe.

From 28 May to 20 June 1951, we opened the Quang Trung campaign in southern Intersector 3 (Ha Nam-Nam Dinh-Ninh Binh), the objective being to aid the guerrilla fighting in the Tonkin delta, with participation by the regiments subordinate to the 308th and 304th divisions. The division cryptographic sections and the regimental cryptographic teams taking part in the campaign accomplished their mission well, ensuring continuous encryption and decryption of command orders in the process of the campaign, especially the 304th Division as a newly formed unit, plunging at once into a large campaign in the delta.

Through three consecutive campaigns, we struck the enemy at places where he had strong fortifications and had reinforcements of air and artillery and a high degree of mobility. Our divisions, for the most part, were newly brought together and built. We wiped out much of the enemy's strength (more than 10,000 men) but at the same time also extracted much experience in command leadership. The cryptographic organizations also came through many tests of their training.

The second Central Party Conference convened from 27 September to 5 October 1951 and estimated the situation and the enemy's schemes and clearly laid out our mission and activity guidelines for the coming period. The conference laid stress on the requirement for raising our quality in three types of armies, stepping up mobile warfare and spreading guerrilla warfare.

In October 1951, we opened the Ly Thuong Kiet campaign with the forces of the 312th Division striking the enemy at Nghia Lo (Northwest). The other divisions also prepared hard to open campaigns in many other theaters, sometimes taking turns training, sometimes fighting, with the form of quick-minded action.

Through a year of striving to strengthen his defensive positions, carry out pacification and increase his forces, the enemy plotted a counteroffensive to regain the strategic initiative. In November 1951 the enemy arrayed twenty battalions to strike and seize Hoa Binh, with the object of cutting our line of communication and supply, faced with attack and wiping out [by] our main force troops. The Main Military Committee decided to open the Hoa Binh Campaign with the forces of three divisions, the 308th, 312th, and 304th striking the enemy on the main front; the 316th and 320th divisions would make a coordinated strike in the enemy's rear, in the Bac Bo [Tonkin] delta region. As for the cryptographic organizations taking part in the campaign, beyond their mission of ensuring service to command between the campaign CP and the divisions participating in the campaign, they would also have the constant mission of liaison between the campaign CP and the General Staff.

On the main Hoa Binh front, the cryptographic organization of the 312th Division under Cde Nguyen Than and the cryptographic organization of the 308th Division under Cde Nguyen Manh Mai served command, fighting in the principal direction of break the enemy's Song Da line.

The cryptographic organization of the 312th Division worked closely with the 308th Division to ensure timely encryption and decryption of communications on the route of advance in order to ensure timely encryption and decryption of communications.

decryption of operational orders in a mobile battle of ambush that wiped out the enemy's 1st Parachute Battalion at Ninh Mit, southwest of Ba Vi mountain, after which it continued good service to the division command in striking the enemy throughout the process of the campaign.

The cryptographic organization of the 308th Division served in handling command orders accurately and speedily in the assaults of the 88th Regiment on the entrenched fortifications at Tu Vu, afterward serving the command of the 36th Regiment striking the enemy in Hoa Binh township.

The cryptographic organization of the 304th Division, under Cde Ngo Duc Tri, served command in combat on routes 6 and 21, speedily encrypting and decrypting orders deploying the 66th Regiment from the Hoa Binh front back to strike the enemy at Thuong Tin, Ha Dong, opening an additional direction of pressure on the enemy to the south of Hanoi.

In the front behind the enemy, cryptographic of the 316th and 320th Divisions entered the delta region of Intersector 3 and the midland to serve in attacking the enemy in cooperation with the Hoa Binh front. In conditions of activity in the region under temporary occupation, we had to continuously cope with encirclement, raids, and the enemy's lethal weapons, working in underground shelters that lacked light, then off into mobile operations, but the cryptographic cadre and personnel overcame difficulties and continued to achieve the requirements of command in hitting the enemy on the fields of Bac Ninh, Phuc Yen, Route 5, Ninh Binh, Nam Dinh, and Phu Ly, ensuring cryptographic security. Unit cryptographic cadre and personnel encrypted and decrypted thousands of High Command messages quickly and accurately. Especially noteworthy was that almost every HQ message providing timely reporting of enemy preparation to raid and develop our strength--principally the times the enemy had forces prepared to encircle us, intending to wipe out our main force [units] around Nam Dinh and Ha Nam--which cryptographic above and below speedily encrypted and decrypted, enabled the army and people of the region to take the initiative in facing and thwarting the enemy's encirclement schemes. Service to cooperative operations in the enemy's rear between the 320th and 304th Divisions also was organized and well taken care of.

At the end of the first lunar month of 1952, the enemy pulled out of Hoa Binh, ending the Hoa Binh campaign: we wiped out 22,000 of the enemy, forced surrender, forced the evacuation of many of the enemy's posts and entrenched fortifications, and expanded many guerrilla bases in the region of the enemy's rear. The enemy's scheme of pacifying the Bac Bo delta and a counter offensive to regain the initiative had been defeated.

The army's cryptographic organizations at all levels had ensured the accomplishment of service to command, participating in a common victory. The Cryptographic Bureau of the General Staff had accomplished its mission of command service to the High Command and the General Staff vis-a-vis the intersectors and divisions, and many times went directly down to the regiments and battalions for timely service in striking the enemy, dashing out, avoiding losses. Through the realities of the campaign, both in the main

direction and the secondary direction, on a broad area of responsibility, we had still ensured cryptographic security, while, at the same time had also diligently decrypted messages of the enemy, discovering and meeting in timely fashion many tricky encirclement actions and pullbacks by the enemy, and serving operational guidance. Otherwise, the Bureau continued to perform well the function of guiding the cryptographic organizations at the various levels, army-wide, in the realization of the specialty mission of each echelon. With the accomplishments it had achieved, the General Staff Cryptographic Bureau was awarded the Order of Military Merit [huan chuong Chien cong], second class.

At the beginning of September 1952, the Politburo decided to open the Northwest campaign, aimed at sapping enemy strength and liberating part of the Northwest. Forces participating in the campaign consisted of the 316th, 308th, 312th, and 351st divisions and the 148th Regiment. The 304th and 320th divisions would carry out a coordinated strike against the enemy in Intersector 3.

In the opening battle of the campaign on 14 October, the cryptographic teams of the 174th Regiment (316th Division) and 141st Regiment (312th Division) encrypted and decrypted the orders of the campaign command post, commanding the units to wipe out the Ca Vinh and Sa Luong posts, etc.

Afterward, the cryptographic organization of the 308th Division encrypted, decrypted and passed on the orders of the campaign CP and of 308th Division HQ commanding the 102nd and 88th regiments to strike the enemy in the Nghia Lo Village and the 36th Regiment to wipe out the Cua Nhu post. With the Nghia Lo Subsector wiped out, the cryptographic organization of the 312th Division served the command of pursuing troops over four successive days and nights.

In the second phase of the campaign, the cryptographic team of the 148th Regiment and that of the 165th Regiment (312th Division) encrypted and decrypted [message traffic] to serve the command of troops thrust deeply in envelopment into the enemy's rear at Son La, Lai Chau, Tuan Giao, Dien Bien [Phu], etc.

On 10 December 1952, the Northwest Campaign was over, the cryptographic teams of the units participating throughout the campaign having closely coordinated to ensure a favorable outcome of the mission for command of the various wings of the army, and coordinated command between the forces in the front, those in the envelopment and in the battle in the enemy's rear.

The period 1951-1952 was one in which the army cryptographic branch built and expanded in all aspects, having established stages of change and progress all over, with respect to political matters, ideology, organization and professional technique. Especially,

the branch had created ranks of cadre and personnel with solid political qualities, a basic level of specialty technique, and had researched and compiled a new type of technique with a high degree of security. Thus the army cryptographic branch strove upward to sufficient capability to meet the requirements of command in combat in a string of continuous campaigns opening up on a large scale, coordinating in many directions, and between theaters across the entire nation.

In particular, the matter of increasing the cryptographic branch's service to direction and command of theaters behind enemy lines encountered obstacles defeating the enemy's pacification schemes - occupying heavily populated areas with much property, carrying out his policy of "taking war to breed war, using Vietnamese people to beat Vietnamese people," making a situation in which the theater behind enemy lines changed to be valuable to us; moreover, the enemy's posts there were difficult and on the defensive.

Along with the above accomplishments, one must speak of the dazzling examples of the doctrine of revolutionary heroism on the part of cryptographic forces at the various levels. These comrades not only stood hardship and sacrifice, overcoming each difficulty to accomplish the mission, but still displayed a firm nature when falling into enemy hands, protecting the security of codes, maintaining professional secrecy, worthy of the esteem of the Party and the army. Here are some representative examples:

In June 1951, Cde Doan Thi Chat, a cryppie of Vinh Tra district, while performing her mission, had her secret underground shelter discovered during an enemy sweep. Cde Chat and a teammate organized to fight, concealed the cryptosystems and struck back at the enemy until the last breath, protecting the security of the technical documents. Also in June 1951, Cde Le Hoang Ninh, cryppie of Tam Binh district, Vinh Tra province, was discovered by the enemy in his secret underground shelter and called on to surrender. After concealing the cryptosystems, he waited for the enemy to get close enough to use a grenade to wipe out the ones surrounding the underground shelter. Knowing that he could not escape capture by the enemy, the comrade used a grenade at the end, exterminating the enemy and heroically sacrificing himself. Cdes Doan Thi Chat and Le Hoang Ninh were both awarded the Order of Military Merit, first-class. The cryptographic team of the 101st Regiment, 325th Division, performing its mission in the enemy area of [Quang] Binh-[Quang] Tri-[Thua] Thien, was ambushed by the enemy, captured, and held prisoner at Hue. They were savagely tortured, but the comrades held fast to the pride of being revolutionary warriors, right up until they drew their last breath.

Cryptographic comrades performing their mission in the Lower Laos-Highlands theater all fell ill with malaria. At times when command combat requirements were urgent, they alternated between being in bed and encrypting and decrypting messages, providing prompt contact for their unit. The cryptographic comrades assigned in the Extreme South [of Intersector 5] theater had to endure many adversities--there were long periods in which they were only supplied with 200 grams of rice and a mug of water a day. Many of these comrades were short of rice, lacked salt, lacked water, and they became ill, unable to see.

Faced with this difficult, arduous situation, the upper echelons concerned themselves with the cryptographic cadre and personnel, that they rotated into the free area to recruit their health and engage in professional study.

With accomplishments and also with lessons learned through experience in the years 1951-1952, there had been created conditions for the branch to move upward in accomplishing its mission during the strategic counteroffensive of 1953-1954.



Lieutenant General Hoang Van Thai, Central Party Committeeman and Deputy Minister of National Defense, speaking at the Conference to summarize the Army Cryptographic Task in the Service of the General Strategic Office of Spring 1975



General Le Trong Tan, PAVN Chief of the General Staff, at the celebration of the fortieth anniversary of the establishment of the Army cryptographic branch (September 1985)



Lieutenant General Doan Khue, Chief of the General Staff, visits the work spaces of the General Staff Crypto Directorate (1987)



The encrypting-decrypting element of the General Staff Forward Crypto Section during the TRAN HUNG DAO Campaign (December 1950)



A cryptographic training class in Viet Bac during the resistance against France

Chapter Four

The Army Cryptographic Branch in the Winter-Spring Strategic Offensive of 1953-1954 and the Dien Bien Phu Campaign (1953-1954)

As we entered the winter-spring of 1953-1954, the resistance of our people to the French colonialist aggressors had entered its eighth year. The developing situation of the war was useful to us. The more we struck, the more victories; the more we struck, the stronger we were. As for the enemy, the more the fighting dragged on, the more he lapsed into defensiveness and embarrassment.

In January 1953 the fourth congress of the Central Party's Executive Committee convened. In Uncle's report, read at the meeting, Uncle analyzed and assessed the situation, and the stubborn nature of the enemy. Uncle showed clearly that "At the beginning of 1952 they lost big in the Hoa Binh campaign. At the end of 1952, they lost big in the Northwest campaign." "The more the enemy loses, the more brutal he becomes," thus "from now on, the war between ourselves and the enemy will become tougher and more complex." In order to move from resistance to total victory, Uncle stressed two principal problems: resistance leadership and military policy; thoroughly mobilizing the masses, reducing land rent and moving to land reform.

The resolutions of the congress also brought up clearly that "Our army must strike the enemy where he is weakest; at the same time we must be heavily engaged behind the enemy." "Whether in the mountains or in the delta, our army must certainly strike the enemy's forces and his ever-strengthening fortifications."

Implementing the line of the resolutions of the fourth Central Party congress, along with the Party's mobilization of the masses to implement the land policy, the great undertaking of building and raising the quality of our armed forces received special attention.

In March 1953, the Main Military Committee passed a resolution concerning getting the troops reeducated politically, the aim being to "Raise the level of class consciousness of the troops another notch, making organizations pure and solid, in order to heighten the combat capability of the troops, in order that the troops will become a larger, stronger force, determined to aid in implementing the land policy of the Party and government."

In the political reeducation classes for middle and upper level cadre, Uncle also taught "The aim of reeducating the army is to make our army into a revolutionary people's army determined on victory."

Through study of the [Party] line and the policy of mobilizing the masses to implement the Party's program of land reform, and through reeducating the army, along with the

entire army, the strengthening of ideology and the organization of the army cryptographic branch was increased manyfold. Cryptographic cadre and personnel determined that the proletarian class position was clearly distinguished by the line between worker and exploiter; from that they increased their patriotism, felt hatred for feudal imperialists, strengthened their love of internal unity, and added to their zeal to strive on to accomplish their speciality mission.

After the stage of reeducating the army politically, the army cryptographic branch was strengthened with respect to organization from top to bottom, making its organization pure and strong. Many cadre Party members came from a working class or farming background, and through tests and training had been selected to augment into the army cryptographic branch. Organizational tasking and cadre in the army cryptographic branch became the objects of concern for the upper echelons and were given closer leadership and guidance.

In March 1953, more than fifty cadre from platoon to battalion level and nearly 200 cadre and party members from the regions were selected to attend the Army Cryptographic School in order to prepare to carry out the cryptographic task. At this time the Army Cryptographic School had the designator C65, with Cde Le Thanh Hai the political commissar and director.

Faced with the urgent requirement for service in the 1953-1954 Winter-Spring Strategic Offensive with the above number of students, the school immediately organized a short-course class in technique and professional knowledge, in order to swiftly augment the units participating directly in the Winter-Spring Offensive; the remaining number of students continued their study according to the syllabus and basic plan until peace was restored. By the end of 1953-early 1954, a number of students were designated to participate in mobilizing the masses to implement rent reduction and land reform.

Also in March 1953, the General Staff appointed Cdes Nguyen Dzuy Phe and Hoang Quyen to go inspect and assist Intersector 5 Cryptographic. HQ, Intersector 5 also selected a number of comrades from units to enter the cryptographic branch, such as Cdes Van Kien and Nguyen Thu. In Nam Bo, the cryptographic organizations were also strengthened and cadre added. At this time the Nam Bo HQ organizations had moved to the Western Area. The Western Area Subsector Cryptographic Section had been merged with the Nam Bo HQ Cryptographic Section, Cde Luong Dzan in charge.

In September 1953, our army commenced reeducation in military matters. As the Main Military Committee clearly indicated, the goal of military reeducation was that "we must again improve and train to be good at tactical technique. We have advanced a step with respect to politics and ideology; now we must advance in tactics and technique so as to have the combat capability to move up to the new stage with the army."¹ Bringing into play the results of the military and political correction, the cryptographic organizations throughout the army carried out emulation in study, raising the level of usage of the various types of cryptographic systems. Research, development, and production of cryptographic systems was speeded up. The Cryptographic Bureau of the General Staff

had improved and raised the level of technique of the various types of systems, system DzC4, assault systems and spell-chart [BA-RA-XO] systems. The Cryptographic Section of Intersector 4 had researched and come up with the Chien Thang [VICTORY] type systems and 4-element Hoa Binh [PEACE]; Intersector 5 had invented a 3-element system; intelligence [tinh bao] cryptographers had invented the Doc Lap [INDEPENDENCE] system; the 320th Division had invented the "6/320" system, etc.

The improved systems just mentioned came about through experience drawn from real-life combat service, so they displayed abundant contents, were light and compact in composition, handy for enciphering and deciphering under conditions of combat in the field, mobile operations, missions behind enemy lines, in jungle and mountain, and other, different areas of operation. In order to take the initiative in the process of serving command in battle, the main force divisions [dai doan] of HQ were set up for concurrent use of both KTA and KTB in order to meet the urgent requirements of the new mission.

From the end of September 1953, the General Staff Cryptographic Bureau implemented an assignment plan to augment the cadre and personnel in the units, while simultaneously researching the arrangement of a number of cryptographic nets in the command system of the campaign and cooperating theaters. The scope of the nets was quite large and complex, comprising nets for skip-echelon, direct contact, and joint liaison, spread out over all of Indochina in these directions:

- Cryptographic organizations of the 316th and 308th divisions would move up to serve the command of units on the main Northwest theater.
- Cryptographic of the 101st Regiment of the 325th Division, and the Cryptographic Team of the 66th Regiment of the 304th Division, along with the units, would move across to Central and Lower Laos to combine operations with the Pathet Lao Liberation Army and the Cambodian Liberation Army, serving liaison with the General Staff and HQ, Intersector 4.
- Cryptographic of HQ, Intersector 5, together with the cryptographic teams of the 108th and 803rd regiments would serve the Highlands [Tay Nguyen] front.
- The cryptographic organizations of the 312th division and the engineer-artillery [cong phao] division, and the cryptographic teams of the 9th and 57th regiments (304th division) would ensure the command responsibility of the operation and divisions, with a view to distracting enemy forces in various directions.
- Cryptographic of the 320th division and the cryptographic teams of the 42nd, 46th, 50th, 238th, and 246th main force regiments would serve the fighting in the enemy's rear in Intersector III.
- The Eastern Area Sub Sector cryptographic organization of Nam Bo Western Area and the Saigon-Cholon Special Sector would ensure combat command in the Nam Bo theater, in coordination with the main theater.

In mid-November 1953, in accordance with strategic direction chosen by the Main Military Party Committee and the High Command, the cryptographic branch made sufficient preparation to ensure continuous liaison from HQ to the various directions and to efficiently serve the appointed responsibilities HQ had given the forces in the various directions.

On 26 November 1953, the General Staff Cryptographic Bureau appointed a task team under Cde Nguyen Cong Khuong to serve Cde Deputy Chief of the General Staff Hoang Van Thai, going to Northwest to personally direct operations in the Lai Chau Campaign.

Ferretting out the fact that our regular forces were appearing in the direction of Northwest, on 20 November the French dropped paratroopers on Dien Bien Phu, intending to help their army at Lai Chau. Discovering that the enemy was preparing to pull out of Lai Chau, Cde Hoang Van Thai sent a Flash message to the 316th Division: "On 6 December 1953, [French Gen. Rene] Cogny issued orders for the French army to pull out of Lai Chau. One element of the enemy army will be transported by air. Those remaining will withdraw by road, and must be completely out by 12 December. The division is ordered to quickly have an element follow Route 41 and strike into the town, while a large element goes to Tuan Giao by the short cut through the Pa Thong pass and cuts the Lai Chau-Dien Bien Phu road in order to wipe out the withdrawing army."

At the same time of this message, HQ also ordered the 308th Division to surround the enemy at Dien Bien Phu and block the road to prevent their running over to Laos.

Executing the above orders, on 10 December 1953 the 316th Division quickly assaulted the enemy at Lai Chau. After a few days of fighting, the 316th Division defeated twenty-four enemy companies, liberating the Lai Chau area.

The Lai Chau victory had great significance, for it was the victory that opened the Winter-Spring Strategic Offensive of 1953-1954. The cryptographic teams of the 174th and 198th regiments had stuck close to the units that staged a forced march along a shortcut to intercept the enemy pulling back from Lai Chau to Dien Bien Phu. Throughout many days and nights through the jungle - crossing mountains, crossing rivers, enduring hunger, enduring cold, participating in the operation - they ensured that messages would get out.

On the Central Laotian front, the cryptonet between the High Command and the campaign CP with the 325th Division, the 101st Regiment (325th Division), and the 66th Regiment (304th Division) on the march into action was maintained tightly. Divisional liaison coordinated operations between our army and the Pathet Lao Liberation Army and the [Cambodian] Isarrac Liberation Army attacking the enemy and liberating large parts of the Central and Lower Laos sectors, and northeast Cambodia, linking northeastern Cambodia bases with the liberated regions of Central and Lower Laos.

On the Intersector 5 axis, on 20 January 1954 the enemy army mobilized six mobile groups, with navy and air support, to attack toward Phu Yen, intending to attack and occupy the entirety of the Intersector 5 free area. The High Command and the Intersector

HQ--through the medium of the cryptographic liaison net--issued instructions in a continuous, timely manner to realize a plan of attack on the enemy's weak spots in the Highlands, to wipe out the enemy's entrenched fortifications and outposts, liberating all of Kontum City and the northwest Highlands and protecting the Phu Yen free area. After serving command in striking the enemy in the Highlands, the Intersector cryptographic organization continued on to serve the units striking the enemy in coordination with the Dien Bien Phu front.

On the Upper Laos front, in accordance with orders from HQ, the 308th Division made a forced march to attack and shatter the enemy's defensive perimeter in the Nam Hu river basin as a diversion and to isolate the Dien Bien Phu entrenched fortification. The division's cryptographic organization ensured that encrypting and decrypting were adequate, timely, and accurate for command communications throughout the process of the attack and the pursuit of the enemy.

On the other fronts, from the northern delta to Nam Bo, they stepped up attacks to sap the enemy's strength, to open guerrilla bases, and to coordinate with the main theater.

In the campaign of strategic assault in the winter-spring of 1953-1954, the Politburo had anticipated having much capability to bring about a great storm of a battle in the northwest. The thinking of the Main Military Committee was to fix the enemy at Dien Bien Phu and possibly resolve to fight there. As for the enemy, they decided to turn Dien Bien Phu into an "impregnable" fortress, preparatory to wiping out our main force troops.

Dien Bien Phu was to become the most decisive measure of strength between ourselves and the enemy in the Winter-Spring 1953-1954 Campaign.

On 6 December 1953, the Politburo of the Central Party decided to open the Dien Bien Phu campaign and as communicated via the combat operations plan of the Main Military Committee, the Politburo decided to establish a Party Committee and Dien Bien Phu Front CP, with Cde Vo Nguyen Giap, member of the Politburo of the Central Party and head of the High Command, as secretary of the Party Committee and Commander-in-Chief of the front.

In order to fulfill the mission of service to the campaign, the Campaign Cryptographic Section, under Cde Nguyen Chanh Can, issued guidance and instructions to the cryptographic organizations of the divisions and units participating in the campaign, directly expounding all facets of the assignment in preparing for the campaign. With the coordinating fronts, it was also necessary to monitor and carefully guide the [cryptographic] techniques in order to ensure continuous liaison in each circumstance.

While preparing to carry out the campaign, the cryptographic organization also had to ensure accurate encrypting and decrypting of each piece of news, concerning the activities of the enemy, concerning the preparation of the battlefield, concerning the Party and political tasks on the Dien Bien Phu front and in the theaters, serving the echelons figuring out the nasty schemes of the enemy, and examining, supervising, and speeding up each activity in preparation for the campaign.

By the end of December 1953, the organizational framework of cryptography devoted to serving the Dien Bien Phu campaign took shape:

- Cryptographic Section of the Dien Bien Phu Campaign Command Post.
- Cryptographic Section of the 308th Division with the cryptographic teams of the directly subordinate regiments.
- Cryptographic Section of the 312th Division with the cryptographic teams of the directly subordinate regiments.
- Cryptographic Section of the 316th Division with the cryptographic teams of the directly subordinate regiments.
- Cryptographic Section of the 351st [Engineer-Artillery] Division with the cryptographic teams of the directly subordinate regiments.
- Cryptographic of the provincial units and regional battalions subordinate to the Northwest Sector.
- Cryptographic Section of the General Supply Directorate with the cryptographic teams directly subordinate at the military relay stations.
- Cryptographic team of Section 2 [i.e., military intelligence - G2] with the cryptographic teams of directly subordinate reconnaissance [units].
- Cryptographic teams in Intersectors III, IV, and Viet Bac to ensure campaign command, transportation, and supply.

By 25 January 1954 each preparatory task for the campaign had been accomplished: our army and people were ready to attack the enemy at Dien Bien Phu. But right at this point, after having carefully considered all aspects, the Party Committee and Campaign CP decided to postpone the opening gun. This decision having been developed and implemented, cryptographic sent the Flash message from the Campaign CP: "It has been determined to change the operational approach [phuong cham, lit., "line"] from 'fast strike, fast resolution' to 'steady strike, steady advance,' although many difficulties must be surmounted," at the same time transmitting all sorts of message orders and plans of the CP, and the staff, political, and rear services organizations to all of the campaign units to hold their fire.

With the determination to change having extremely serious significance for the Dien Bien Phu campaign, the instructional contents from the campaign CP to the units via secret message had to be exactly accurate and absolutely secret, for the time element was very pressing: if there were only a small error in a sentence, or arrival a minute late - let alone an hour - it could have great influence on the outcome of the campaign.

The cryptographic organizations, from the Cryptographic Section at the Campaign CP to regimental cryptographic, all searched for methods of organizing the work of encrypting and decrypting, transmitting messages as fast as possible, allotting work sensibly, holding tightly to the liaison net, closely pooling efforts with the radio station to track messages,

and for ensuring that secret messages were sent accurately and promptly to satisfy command requirements.

Together with serving the campaign CP's command over directly subordinate units participating in the campaign, the matter of maintaining cryptographic liaison with the leadership organizations of the Party and the High Command, also as with the cooperating theaters, had especially serious importance. Daily, through the Cryptographic Bureau of the General Staff in the rear, the Campaign Cryptographic Section regularly encrypted and decrypted the instructional views and communiques of the Central Party Politburo vis-a-vis the process of command and instruction for the campaign, at the same time sending messages from the Comrade Commander-in-Chief in the Dien Bien Phu campaign to the theaters to step up their cooperative actions and receiving news of victories by our armies and people in various places.

13 March 1954 was the day set for opening fire and attacking the enemy, opening the campaign. The system of cryptographic technique from campaign CP to the divisions and regiments had been augmented, arranged, and fully worked out from the time of the order postponing the attack on 25 January 1954, and combat service preparations had been ensured.* The Cryptographic Section of the 312th Division, the Cryptographic Team of the 141st Regiment, and the Cryptographic Team of the 209th Regiment served the command of the troops attacking the enemy at the Him Lam entrenched fortification [French strongpoint "Beatrice"]. Then, on 14 March the Cryptographic Section of the 308th Division and the Cryptographic Team of the 88th Regiment, together with the Cryptographic Section of the 312th Division, the Cryptographic Team of the 165th Regiment, and the Cryptographic Section of the 351st Engineer-Artillery Division ensured service to the command of the troops attacking and wiping out the enemy at the Independence Hill entrenched fortification [Fr. strongpoint "Gabrielle"]. After five days of fighting, we totally wiped out two of the enemy's first class and strongest entrenched fortifications. "Victory in the initial assault foreshadowed total victory for the campaign. It proved the line 'steady strike, steady advance' was totally correct. It marked the growth of our infantry, communications, artillery, and antiaircraft in combined branch combat."

At 1730 on 30 March 1954, we began to fire on the crests of the hills on the east. Cryptographic of the 312th Division (with the 141st and 209th regiments) and the 316th

* The history of the PAVN signal corps expands on communications and communications security arrangements for the Dien Bien Phu campaign. Front CP to divisions is said to have used OPCODE via the World War II vintage U.S. AN/GRC-9 and SCR 694; regiment to battalion used jargon code via the U.S. BC 1000 (SCR 300) "walkie-talkie" backpack, and battalion to company used the PRC 702 "in the clear." Artillery regiments issued fire orders in the clear. In addition to radio, single-wire field telephone arrangements were extensive. Signal panels (blue-white) and semaphore flags (red/white) were used and, at the squad level, bugles and whistles. (*History of the Communications-Liaison Troops*. Hanoi: Communications-Liaison HQ, 1985. Vol. I, 303-304.)--Tr./Ed.

Division (with the 98th Regiment) served the command of the troops hitting hilltops C, E, and hill D ["Claudine," "Elaine," "Dominique"]. In this stage of the assault, the most decisive strike took place on hills A1 [part of "Anne Marie"] and C1, ending with us and the enemy each holding half of a hilltop. The assault on the eastern sector temporarily halted on 5 April 1954. In this assault stage, we had seized a large part of the important high points, and wiped out 2,500 of the enemy.

After opening the second assault stage, we continued to encircle and cut off and smash the enemy positions.

As of 1 May 1954, we opened stage three of the assault, into the heart of the Dien Bien Phu entrenched fortification, aiming to attack and fully occupy the high points on the eastern side, restricting the sphere of the enemy on the western side, wiping out the heart of the entire entrenched fortification in a general assault.

The cryptographic organizations of the units participating in the fighting served tactical operations command:

The 98th Regiment (316th Division) wiped out the enemy on hill C1; the 209th Regiment (312th Division) eliminated fortifications 505A and 505 at the foot of the hilltops on the eastern side, and the left bank of the Nam Rom river; the 88th Regiment (308th Division) struck the enemy at position 311A on the western side; the 57th Regiment (304th Division) struck into Sector C northeast of the southern subsector; the 36th Regiment (308th Division) wiped out position 331B, etc.

By the night of 6 May, orders for the general assault were speedily transmitted to the commanders of the units. Our army was divided up to make many points of attack on the positions: hill A1, hill C2, position 506 north of the Muong Thanh bridge, position 310 on the western side, restricting the enemy's holdings. The next day, 7 May, our army wiped out the enemy in the positions near the Muong Thanh Bridge and the left bank of the Nam Rom River, striking into the center, advancing straight to the enemy CP.

The afternoon of 7 May 1954, a report from the commander of the 312th Division was passed to the Campaign HQ: "All enemy forces in the central sector have surrendered. [General] de Castries and all of his staff are taken."

That night the Political Commissar of the 304th Division reported to Campaign HQ: "The 304th Division has taken alive the entire enemy headquarters at Hong Cum [Fr., "Isabelle"] on the run; we have Colonel Lalande."

Also that night, from the CP of the Dien Bien Phu campaign, the campaign cryptographic cadre and personnel encrypted a message from the Commander-in-Chief of the campaign reporting the glad news of the victory to the Politburo and Uncle Ho, and to the theaters of war: "At 1730 hours 7 May we wiped out the entire concentration at the Dien Bien Phu entrenched fortification. The Dien Bien Phu campaign is victorious." Just a half hour afterward, the report of our army's great victory at Dien Bien Phu was sent

from the General, Commander-in-Chief of the front, to the Politburo and the revered and beloved Uncle Ho.

The 1953-1954 Winter-Spring Strategic Offensive of our army and people was concluded by the glorious Dien Bien Phu victory. The cryptographic branch of the army had fulfilled its responsibility to serve the various levels of command, from the High Command to the units participating directly in the campaign and the coordinating theaters of war, doing their appropriate bit in making this a historic feat for our race.

Through organization and instruction in cryptographic technique to serve command in the Winter-Spring 1953-1954 and the historic Dien Bien Phu campaign, the army cryptographic branch gleaned valuable mission experience in campaign cryptography.

The strategic offensive opened in many directions, combining many forces, with many segments, over the largest sphere experienced to date, with a liaison net expanding very widely, while the cryptographic organizations army-wide were using differing cryptographic techniques from each other. At the High Command and the main force divisions participating directly in the Dien Bien Phu campaign, they had started off using KTB concurrently with the use of KTA. In the Intersectors, the units only used KTA, but also had many different forms, the Forward Area Cryptographic of HQ using all types of single encipherment spell-charts [BA-RA-SO] and spell-charts superenciphered by random [loan] key. Through requests for service and technical conditions, therefore, the job of arranging the cryptonet, issuing instructions, and organizing the use of cryptographic technique was quite complex and difficult.

Because of thoughtful research and anticipation concerning the developing situation in the implementation of the campaign, and thoughtful preparation for every aspect of technique, and organization in the use of cryptographic technique to have one tight, sensible method in each of the various directions, then, from the outset, we ensured that we could fully grasp the situation, take the initiative, and favorably resolve situations arising "out of the blue," requiring immediate attention, in order to meet in every respect the requirements of command in the principal theater and even in the cooperating theaters.

In realizing the use of cryptographic technique to serve the campaign, the cryptographic organizations clearly perceived that the requirements of the command task were increasing and becoming more urgent with every passing day, and that these requirements were expanding rapidly. Striving to satisfy the requirements of the command task is to strive without cease, and the army cryptographic branch wanted to fully satisfy command requirements, which meant raising and improving every aspect of technique. For the internal structure of chart systems, [finding] a method of arranging the plain-cipher parts in a way that was sensible and most favorable for the task of enciphering and deciphering; the spell-chart format, while ample, when used for enciphering and deciphering took long to find the plain units, thus limiting efficiency, inconsistent with conditions of mobility and combat. The technical shortcomings were overcome, however, by the training of the enciphering and deciphering people but

continued to influence the flow of messages and their timeliness. In the Dien Bien Phu campaign, the 36th, 102nd, and 165th regiments also had situations of backlogged messages to encipher that were not finished. The 102nd Regiment (308th Division), on the march eight kilometers from Dien Bien Phu, had orders to turn around and take a different road, but because the message arrived late, the unit continued its advance, encountered the enemy, and were forced to fight. The 308th Division was on the march to Son La, when HQ sent a message to division HQ and the units to halt and await orders, but because that message arrived late, the troops continued on some twenty km before they received the message and had to turn around. (In fact, the delay in receipt is still unresolved, for different reasons.) In circumstances of our pursuing the enemy or making a very fast movement, the time of stopover was only quite short, but the requirement for transmitting orders and instructions in these conditions was very urgent, and, if the message volume was large, cadre and personnel encountered not a few difficulties, but cryptography prevailed, despite all obstacles.

After the historic Dien Bien Phu victory, the Geneva accords were signed. The responsibility for serving the task of leadership and direction in the implementation of the accords and effecting the cease fire, regrouping the armies, and taking over the liberated region was established as being very urgent and by no means uncomplicated.

In July 1954, cryptographic cadre and personnel of our army in Laos, Cambodia, Nam Bo, and Intersector 5, together with Southern troops and compatriots, regrouped in the North. Twenty-five army cryptographic cadre and personnel were selected to remain in the South, and a team of two cryptographic comrades was arranged to stay in Cambodia to continue to serve revolutionary responsibilities in the new situation.

At the end of 1954, the tenth army-wide cryptographic conference was organized in Hanoi. The conference carried out a review and estimation of the situation involving every aspect of the cryptographic task during the time past and discussed the direction and responsibilities of the army cryptographic branch in the coming stage. The conference unified a number of problems concerning cryptographic technique and the professional task with important instructional significance:

1. Cryptographic technique is the product of the class struggle. It serves the Party and the army. With all their hearts and all their intellect, cryptographic cadre and personnel must serve unconditionally, determined to protect the essential secret matters of the Party in each difficult circumstance.
2. Cryptographic technique has three basic principles: constant secrecy is the first principle - speed and accuracy must be combined, and secrecy must be spread over the foundation.
3. Cryptographic technique serves the army, thus it is consistent with strategic and tactical thought, with the operational line and the form of the battlefield.²

The conference also made clear: "Secrecy, speed, accuracy are the basic content of cryptographic technique. We swear with all our hearts and all our intellect to stand definitely on the position of the worker class, always raising the technical level, ensuring the secret matters of the Party, the army, the people, in any circumstances at all, even though one must give his life to protect the secrets of the Party, we also completely safeguard honor and dignity. This is technical thought, or, to put it differently, our cryptographic professional thought."³

The People's Army of Viet Nam cryptographic branch was formed immediately after our people's democratic nation was born, amid conditions of difficulty and complexity. The initial cryptographic organization was established and received responsibility both for building organization and technique and for serving the great resistance against the aggressive French colonialists, to secure and keep the independence of our nation.

Through nine years of protracted resistance, following the teaching of Uncle Ho: "Cryptography must be secret, swift, accurate. Cryptographers must be security conscious and of one mind." The army cryptographic branch strove to go from have-not to have, at each step building and growing in every aspect, ensuring completely and outstandingly its responsibility for guarding the secrets of the Party and of the army.

From a few cadre receiving from the army the responsibility for the cryptographic task at the outset, until the success of the resistance, the army cryptographic branch built and developed a body of technical cadre and personnel to meet the requirements of serving the resistance. These were comrade cadre, party members, tempered and tested on the fields of battle and who had grown in their level of specialized technique, profoundly alive in revolutionary ideals, firm in class outlook, quality, virtue, well prepared to accomplish the responsibility that had been entrusted. These comrades were the precious capital in building and leading the branch upward to respond to the revolutionary requirements in the new stage.

From a position of having no capital at all from the standpoint of knowledge and cryptographic technique, the army cryptographic branch had searched out and created the science of Vietnamese cryptographic technique, with a technical level that never stopped advancing and rising, rendering unsuccessful the enemy's schemes for collecting information through cryptanalysis, protecting the secret content in the tasks of Party leadership, direction, and command of the army passed through the various communication media. While concentrating on the responsibility to serve the resistance against France, the army cryptographic branch laid the initial foundation on which to construct the basic theory of the science of Vietnamese cryptographic technique.

Through practice, the organization of cryptographic technique and the professional task methodology of the army cryptographic branch served to ensure command,

conforming with the peculiarities of the army's tactical situation, raising step by step the level of military, technical, and administrative capabilities of the branch, overcoming initial dislikes and proceeding to build the cryptographic branch's professional specialty task activities in a regular manner, building each task relationship according to the hierarchical cryptographic system, fixing mission responsibilities clearly: tables of organization and regulations fixed, tight, consistent with the nature of the mission.

Although there were shortcomings and weaknesses in the technical professional tasks, principally in conditions at the beginning of building the branch (such as building the tables of organization, settling professional [matters] appropriate to the nature of the mission albeit still not timely; and the matter of expanding the level of technique, while still falling short of the requirements of the resistance) but through practice in the task of serving leadership, direction, and command, the accomplishments of the army cryptographic branch had been demonstrated and continued to be rather great.

The deciding factor in the spread, growth, and accomplishments of the army cryptographic branch was the leadership of the Party and the command echelons of the army. Concern on the part of the Central Party's Standing Committee, on the part of Uncle Ho, the coaching by the MND, the General Staff, the political commissars and commanders at the various levels--these were the sources of encouragement in strongly rousing the branch.

Bringing into play the accomplishments achieved, cadre and personnel in the army cryptographic branch strove directly to move up to accomplish successfully each mission in the new phase of the revolution: the phase of building socialism while resisting America, to save the nation.

Notes

1. The General Staff's order mobilizing military reeducation (1953).
2. Document of the Tenth Army-wide Cryptographic Conference.
3. Ibid.