Sometime in 1971, a Special Forces team, possibly part of the JCS's Shining Brass project to interdict the Ho Chi Minh Trail, and probably made up of a mix of local tribesmen with an American or Vietnamese commander, settled in at some unidentified point along the trail in Laos. Hiding in the forest, they photographed a North Vietnamese truck convoy that was moving along the roadway. They took a remarkable series of pictures, one of which is included below. In the photo, the trucks are carefully nosing around a huge bomb crater filled with water and debris from nearby shattered trees. What trees that are left standing are nothing more than bare, scarred, darkened trunks. Off to the side of the dirt track is an expended metal casing from a U.S. aircraft: whether it is a jettisoned fuel pod or a piece of an ordnance package like napalm is unknown—not that this is important. The entire landscape, with its haphazard debris and chaos of shadows and light seemingly struggling with one another, is eerily reminiscent of the set from the classic German surrealist film The Cabinet of Doctor Caligari. At the same time, the picture says a lot about the nature of the Ho Chi Minh Trail, the communist infiltration of troops and supplies to the south, as well as the American response to cut this flow, mostly in terms of a campaign of air interdiction that dwarfed anything before or since in twentieth century military history.

(U) The true size and nature of the Ho Chi Minh Trail were quite different, of course: it had to be in order for it to withstand the onslaught of American and Allied air power thrown against it starting in 1964 and continuing into 1972. During this time, the trail's operation also was under constant pressure from forays by U.S. and ARVN special forces commanding teams of irregular troops recruited from local tribes. In early 1971.
Then, it had been used by anti-French Vietnamese guerrillas to facilitate travel from Tonkin to the regions of Annam and Cochin in the south. This route was probably selected to take advantage of the colonial road system constructed by the French administration which had been trying for years to improve communications within Indochina and especially to the interior of Laos. Such roads as Route Coloniale (RC) Nombres 12, and 8 west from northern Annam through the Mu Gia and Nape Passes to the intersecting routes running north and south in southeastern Laos would figure prominently in later years as the backbone of the communist supply and infiltration system.

(U) During the war with the French, General Vo Nguyen Giap used the trail system to move troops and supplies to the Cochin and Annam regions. For the most part, the trail remained a set of simple pathways, and travel time on foot from Tonkin to points south, such as Saigon, could take as long as three months. In 1954, with the Geneva settlement, the trails were used by the Viet Minh troops and political cadre who headed north of the seventeenth parallel as part of the military disengagement. The trail system was also used by civilian refugees fleeing between the two Vietnams.

(U) Historically, there had been a crude communications route in use since the early 1940s.

At various times, the South Vietnamese military operated near portions of the trail, occupying spurs, destroying paths and setting up...
ers decided to take an aggressive stance in response to Diem's increasing repression of the southern communists. This decision was a distinct change from the previous years when Hanoi, concentrating on its own internal development, and certain of Diem's inevitable fall, generally had refrained from supporting the southerners.

(U) Hanoi's change of policy was due largely to the urgings of Le Duan, a veteran member of the Viet Minh hierarchy, who had spent some time in the south during the preceding months assessing the plight of the southern communists. He came back and reported to the party leadership how difficult it had become for the communists there because of Diem's repressive measures, and he pushed for action by Hanoi. Ho Chi Minh, who had held out for a program only of conventional political activities such as recruitment, civil agitation, and propaganda, relented in the face of Le Duan's arguments. Hanoi's new policy was most succinctly put this way:

(U) With the escalation of the struggle between Saigon and the southern communists, the trail assumed a new importance as a communications and supply route. The impetus for this change came from Hanoi. In May 1959, at the 15th Plenum (Enlarged Session) of the Central Committee of the Lao Dong Party, Hanoi's lead-

To achieve national reunification on the basis of independence and democracy, the session mapped out the following tasks: the entire people will unite and strive for national reunification ... to build a peaceful, unified, independent, democratic, prosperous and strong Vietnam...
(TS//SI) There is some disagreement among historians as to when Hanoi actually began to step up the tempo of the insurgency in the north. Some contend that the southerners felt Hanoi was too tentative and unenthusiastic about escalating the campaign against Diem and that it was not until early 1960 that Hanoi truly committed itself to the struggle in South Vietnam. Hanoi's change of heart may have been due to the southerners' proposal to initiate a program of political terrorism and insurgency on its own.

(SI//SI) It was not until mid-1960 that a measurable increase in guerrilla attacks and political activities could be established.

(U) The second decision by Hanoi was to organize a series of military units (Doan) to oversee the infiltration to the south. Each of the units was assigned a region to study, develop an action plan, and then implement a system and supporting techniques for infiltration. Furthermore, these units had to establish a security barrier to assure the continuous infiltration of men and supplies south, as well as disguise Hanoi's role. Three such units were organized in mid- to late 1959: Military Group 559, established in May 1959, was responsible for infiltration from North Vietnam to South Vietnam through Laos and Cambodia; Military Group 759, formed in July 1959, was to organize infiltration of men and supplies to the south by sea; and Military Group 959, which first appeared in September 1959, was to support the Pathet Lao, the Laotian communist guerrillas, through the dispatch of supplies, advisors, and "volunteers" from North Vietnam.

(U) Three practical decisions had emerged from the Plenum with strategic consequences for the course of the insurgency against Diem (and the later conflict with the United States). The first was the order to begin infiltrating military, political, and technical cadres into South Vietnam. For the first four years or so, these infiltrators were southern-born Viet Minh who had relocated to the north of the demarcation line after the Geneva accords. Upwards of 90,000 Viet Minh had gone north; many were ready to return south to resume the struggle.
ating in Laos in support of the Lao Issara[k] (Free Laos) movement. By 1953, over 17,000 Viet Minh cadre were supporting the Laotian communists against the French. Of course, the political landscape had changed drastically since the end of the French-Vietnamese phase of the Indochina War: there were now three independent and sovereign states for Hanoi to contend with. However, the DRV had allies in all three countries: in South Vietnam, there was the communist insurgency carried out by the southerners, while the national communist movements in both Laos and Cambodia provided the Vietnamese infiltration effort with Allied troops, bases of operation, and security for the sections of the trail that ran through their nations.

(U) These three decisions set the stage for the infiltration into South Vietnam. First of all, we need to consider the struggle for Laos, which can be considered as the “preliminary” step to securing the supply and infiltrations routes to the south.

(U) An Embattled Kingdom: Group 959 and Hanoi’s Role in the Struggle for Laos, 1959-1962

(U) Laos is a small mountainous country filled with mist-covered vistas and inhabited by a number of ethnic tribal groups. Its 91,400 square miles, which would encompass the two states of Wisconsin and Illinois, consist of some of the most rugged terrain imaginable. Jungle-covered mountain peaks as high as 9,000 feet range throughout the north; while the south has plateaus as high as 3,000 feet cut by various river gorges and precipitous valleys. Tropical rain forests of mixed evergreens, second-growth banana and bamboo cover much of the land along with a tough, tall grass called tranh. The transportation system, even after years of determined construction efforts by the French colonial administration, remained rudimentary, with a few all-weather roads connecting the royal capital of Luang Prabang with other major cities like Vientiane and Xam Nua. Lacking aircraft or helicopters, the best way of getting around was the extensive series of streams and rivers, notably the Mekong, which due to the history of the political geography of French Indochina and Thailand, became the southern border for much of the country.

(U) Politically, the country of Laos was created by the French in the middle of its war with the Viet Minh. The distant provinces had been linked administratively to the Kingdom of Luang Prabang during the earlier decades of French colonial rule. However, political control extended into few of the disparate tribal and provincial regions. The French made the king in Luang Prabang titular head of Laos. A coalition government, the Royal Laotian Government (RLG), was put into place in 1953. The Geneva Accords of 1954 also had carried provisions for a political settlement in Laos. The communist Laotian faction, formed in 1950, and now known as the Pathet Lao (or “Lao Nation”), was allowed to group its troops in the two northern provinces of Phong Saly and Xam Nua, which bordered North Vietnam. The Pathet Lao (PL) forces were to remain in the two provinces until, through negotiations with the Royal Laotian Government authorities, they would be integrated into the Royal Laotian military forces. The Viet Minh ostensibly withdrew; and their main line units did leave Laos, but numbers of military and political cadre, as well as technicians, stayed behind to organize the PL. This cadre was organized as Group 100 and was based at the DRV-Laotian border near the town of Ban Nameo.

(U) Laotian domestic politics of the 1950s remained a convoluted affair. Overall, the various factions contending for control wished to stay out
of a general civil war. However, the only way to avoid bloodshed was to establish and maintain a finely balanced coalition among the several factions, notably the nationalists and communists, but also conservative nationalists and so-called "neutralist" factions, the latter of which were mostly private armies who would join whatever side promised the best benefits. The Laotian political arena also had a certain fairy tale-like atmosphere, due, in no small part, to the fact that most of the major factions were led up by various princes of the Royal Family. Notable among these were Prince Souvanna Phouma, who was the nationalist leader (although he favored a neutralist stance), and his half-brother, Prince Souphanouvong (the "Red Prince"), who led the Pathet Lao, the communist insurgency.

In the years following the Geneva Accords, slow progress was made towards arranging for a coalition government in Vientiane. By late 1957 an agreement was concluded which reestablished the Royal Laotian Government with the participation of the Pathet Lao. The provisions of the agreement called for the integration of the Pathet Lao battalions into the Royal Laotian Army, regional coalition governments for the two northern, communist-dominated provinces of Houaphan and Louangphrabang, and the inclusion of Souphanouvong in the national government in Vientiane. The agreement appeared to have the possibility for succeeding and had developed a sort of political "momentum" of its own.
(U) However, the Laotian coalition agreement barely made it out of the conference room before it expired. The Eisenhower administration was increasingly dissatisfied with Souvanna Phouma’s coalition-building efforts with the communists, and switched its backing to an anticom- munist nationalist group. This faction displaced Phouma and began openly courting the anticom- munist governments of Taipei and Saigon. Washington, which was bankrolling the entire cost of the RLA, hinted at a possible loss of aid if the PL personnel were admitted into the army without being subject to “reindoctrination.”

(TS/SH) In May 1959, the Royal Lao Government put the leaders of the Pathet Lao political party, the Neo Lao Hak Xat, (Lao Patriotic Front) including Prince Souphanouvong, under house arrest and disarmed one of the PL battalions. The other battalion slipped away into the jungles of northern Laos. Fighting in the northern region broke out almost immediately as the PL carried out a series of hit-and-run raids on RLA outposts bordering the DRV.

This would have made sense, since there was a large Vietnamese population made up of refugees and expatriates living in northeast Thailand. The ethnic population in Thailand had been a source of supplies and political support to the Viet Minh since the late 1940s.

(U) During the French phase of the Indochina War, about 70,000 Vietnamese fled their homelands and settled in northeast Thailand. Their presence in a region of Thailand known for its economic problems and political restiveness caused Bangkok considerable concern. The Thais were anxious to get rid of the Vietnamese. In the late 1950s, Hanoi, perhaps anxious for political recognition after the political debacle at Geneva, offered to have the refugees repatriated. Originally, Thailand wanted the International Red Cross to oversee the repatriation so as to avoid recognizing the communist regime in Hanoi by negotiating directly with the DRV. However, Bangkok ultimately was forced to deal with Hanoi. In 1959, an agreement between Thailand’s and the DRV’s Red Cross Societies allowed for the repatriation process to begin the next year. By 1963, about 36,000 refugees had returned to the DRV. The remaining Vietnamese slowly adapted to Thailand, but not always completely. By the mid-1960s it was still not unusual to find portraits of Ho Chi Minh next to the Thai king on the walls of the huts of the ethnic Vietnamese.
Kong Le brought his battalion of paratroops into Vientiane and seized the government buildings, radio station, and airport. He asked for, and got, the reinstallation of Souvanna Phouma as prime minister.

(U) The ousted nationalist leader, Phoumi Nosavan, organized a counterattack, aided in large part by an active U.S. resupply effort and a passive Thai blockade of the southern border. Phoumi formed a new political organization called the Revolutionary Committee (named probably, in part, to compete with the revolutionary platform of the communists) and marched on Vientiane. Phouma and Kong Le were besieged in Vientiane. Desperate for help, Phouma appealed to the Soviets for aid. Within nine days, the first contingent of Soviet transports began delivering supplies to Kong Le's troops in Vientiane and Pathet Lao centers in northern Laos. For the next five months, Soviet transport aircraft, mostly the IL-14 (CRATE), made hundreds of flight between Hanoi and supply terminals in northern Laos and North Vietnam. More ominously, the situation in Laos had led to the first large-scale intervention of regular North Vietnamese units. Fighting alongside the Pathet Lao, various PAVN battalion were instrumental in securing the Plain Des Jarres, the plateau north of Vientiane. Kong Le, in the meantime, had been forced north out of Vientiane where he soon joined up with PL units fighting in the Plain Des Jarres.

(U) According to an official communist history published after the war, the mission of the Group 959 was to provide specialists for the Supreme Command of the Pathet Lao and organize the supply of Vietnamese material to the Laotian communist revolution, and to command the units of Vietnamese "volunteers" operating in the Xam Nua and Xianghoang provinces. Group 959 also had a cryptographic section which advised the PL technicians and its leadership on the use of Hanoi-supplied ciphers, codes, and procedures.

(U) The fighting between the nationalists and the Pathet Lao quieted down with the arrival of the rainy season in early 1960. Then occurred one of those unpredictable events that dramatically changed the political balance in Laos: the coup by Captain Kong Le in August 1960. Kong Le was a French-trained officer in the paratroops of the Royal Laotian Army. Over the years he had become disenchanted completely with the intervention of outside countries – principally the United States – in the affairs of Laos. His sentiments were exclusively neutralist and xenophobic: "I have fought for many years and have killed many men, but I have never seen a foreigner die." Taking advantage of the ruling cabinet's absence from Vientiane – it was in Luang Prabang consulting with King Savang Vatthana –
The Soviet airlift had been viewed by Washington as an escalation of the crisis and led to diplomatic protests being presented to Moscow. There was a real concern in Washington that either the Soviets or the Chinese Communists, or both, would go beyond the supply flights and directly intervene in the fighting. On 14 December 1960, the NSA director, Vice Admiral Laurence H. Frost, instituted a SIGINT Readiness Condition BRAVO for U.S. SIGINT sites on a theaterwide basis throughout the Far East.

By February 1961, Readiness BRAVO was downgraded to a Readiness ALPHA, when it was realized that there was no prospect of armed intervention by either the USSR and the PRC.
(U) In light of what eventually happened in South Vietnam, with the huge American intervention and combat for about eight years, it is something of a surprise to realize that, in the early 1960s, the United States considered Laos the critical point in Southeast Asia. By May of 1961 the situation in Laos had reached a critical point for the new Kennedy administration. The effects of the Soviet airlift and North Vietnamese intervention, totaling about 6,000 to 10,000 combat and support troops, had enabled the forces of Kong Le and the Pathet Lao to recover from their initial defeats. The latter now controlled the strategic Plain of Jars and much of eastern Laos, adjacent to North and South Vietnam. Military pressure at both Luang Prabang and Vientiane was making Phoumi’s hold on these cities precarious at best. In reaction to the spectre of a possible complete communist victory in Laos, an advisor to the Kennedy administration studied the option of military intervention. Echoing the earlier Eisenhower “domino theory,” President Kennedy viewed Laos as the strategic “key to Southeast Asia.”

(U) To counter the communist threat, the Pentagon developed OPLAN X-61, a plan for U.S. troops to enter Laos, as well as a SEATO version, Field Forces Plan 5-61. The U.S. Seventh Fleet sent additional carriers to the South China Sea, while a U.S. Marine battalion was readied to land in Thailand. Exactly how many U.S. troops would be committed remained sketchy – planners favored numbers anywhere from 60,000 to 140,000 men, though U.S. Secretary of State Dean Rusk opted for 10,000 troops in an enclave around Vientiane.

(TS//SI) In conjunction with this, NSA beefed up its support to the region. A Laotian Watch Office was set up with twenty-four-hours-a-day operations, seven days a week. A special TDY team was readied to fly to the ASA site at Clark Air Base to set up a second-echelon SIGINT reporting mission. (SIGINT reporting can be performed at various levels, or echelons. Field site reporting is considered “first echelon.” If a field site has no reporting capability, then its intercept is forwarded to an intermediate site whose reporting then is considered “second echelon.”)

(U) However, the proposed intervention never materialized. The most likely explanation is that President Kennedy simply did not want to fight a war in Laos. He and his advisors had developed a low regard for the military capability of Phoumi’s forces. The Royal Laotian Army, along with its ethnic Meo and Hmong units, had outnumbered the Pathet Lao and Kong Le forces, yet the latter had gained the upper hand by April. An advisor to Kennedy had derided RLA as “clearly inferior to a battalion of conscientious objectors from World War I.” Also, the U.S. Army’s chief of staff and U.S. Marine Corps’ commandant were skeptical of supporting a full-blown military intervention, citing logistics and terrain problems as prohibitive factors.

(U) Instead, in early May 1961 the two Laotian factions sat down to negotiate another coalition arrangement. It has been suggested by some official U.S. histories that the impetus for the meetings by the Laotians was the possibility of U.S. military intervention. At the time, there was an ongoing Southeast Asia Treaty Organization exercise known as Pony Express, which was practicing an insertion of military forces in a notional country to meet an external assault. The combination of the announced possibility of U.S. intervention and the existence of SEATO forces practicing such a contingency may have impressed the Laotian factions.
(U) For the next year, the Kennedy administration supported the Phouma faction, and tried to convince Phoumi to join the coalition with his opponent. Phoumi resisted both Washington's blandishments of economic and political help or the billy clubs of threatened sanctions. However, Kennedy did not want to push the Laotian leader too hard. Then Phoumi committed a mistake which nearly provoked another intervention crisis for the United States.

(U) In early 1962, Phoumi began a buildup in the isolated town of Nam Tha in the remote northwest province of Louang Namtha, near the border with the PRC. What exactly Phoumi wanted to accomplish is unclear. The town was far from any strategically important area and was difficult to supply or reinforce. Perhaps, he hoped that a battle there would precipitate U.S. intervention. Whatever his intentions, on 6 May North Vietnamese and Pathet Lao troops attacked Nam Tha and drove the 4,500 RLA defenders from it.

(TS//SI) Fearing another general offensive that could overrun the rest of Laos, the U.S. quickly organized a contingency force, Joint Task Force 116 (JTF-116), composed of ships of the Seventh Fleet which sailed into the Gulf of Siam. A battalion of U.S. Marines was airlifted to Udorn, Thailand, to join a Marine air contingent already there. NSA reacted by issuing another SIGINT Readiness BRAVO and putting all the sites in the region, including the year-old ASA facility at Ton Son Nhut Airbase, outside of Saigon, on alert.
(U) Another Geneva conference, this time for Laos, was organized by the Soviets and the British. Phoumi, perhaps realizing he lacked American support, finally signed up to a coalition government. On 23 July 1962, the "Geneva Declaration and Protocol on Neutrality of Laos" was signed by the participating fourteen nations. The major provision of the treaty called for the removal of all foreign troops and advisors, with the exception of the French (who would leave shortly anyway). Despite this agreement, both major contenders, the United States and North Vietnam, continued to covertly prosecute the war. About 6,000 PAVN troops and advisors remained in northern Laos, while the U.S. supplied paramilitary units, mainly Colonel Vang Pao's army of about fourteen thousand Meo tribesmen, who continued the fight against the Pathet Lao.

(U) For Hanoi, the situation could not have ended much better than it actually did. Its plan of supporting the Laotian communists all those years since the end of World War II had resulted in direct control, or indirect control through the Pathet Lao, of all of the regions of eastern Laos adjacent to the Ho Chi Minh Trail. The Vietnamese communists had been flexible enough politically to seize the opportunity provided by Kham Le's coup and defection, and had capitalized on the military and political weaknesses of the Royal Laotian Government. Hanoi could now concentrate on building the trail and infiltrating men and supplies to the southern communists.

(U) Military Group 559, the Construction of the Ho Chi Minh Trail, and the Southern Infiltration, 1959-1962

(U) As was mentioned at the beginning of this chapter, the Ho Chi Minh Trail was more than a simple pathway from North to South Vietnam. It was a military engineering project that the North Vietnamese continually expanded and improved until it had become a vast network which includ-
ed, by 1974, all-weather surfaced roads, footpaths, and a network of gasoline pipelines that, over a period of about fifteen years, allowed the movement south of as many as one million soldiers and political cadre – almost a third of them to their deaths – as well as supplies for the combat units fighting the South Vietnamese and the Americans. In this sense, the Ho Chi Minh Trail is one of the great achievements in military engineering of the twentieth century.

(U) However, the Ho Chi Minh Trail was more than a supply route cut through the heart of Indochina; it was, in essence, the heart of the Vietnamese communist war effort, encompassing the entire supply and reinforcement network running from points in North Vietnam down to a system of routes, trails, paths and supply-heads in South Vietnam. It took on an existence of its own and consumed the efforts of an enormous number of people to keep it running, especially in the face of the Allied air offensive determined to shut it down.

(U) Their effort was a success. For example, between 1966 and 1971, the CIA estimated that the DRV sent over 630,000 soldiers, 100,000 tons of food, 400,000 weapons, and 50,000 tons of ammunition into South Vietnam by means of the Ho Chi Minh Trail.36 The air war to stop the supplies and reinforcements proved, in the end, to have been ineffective. Communist troop losses to the air assault are difficult to ascertain with any precision. Estimates varied: MACV claimed upwards of 20 percent of all troops were casualties, either from the air strikes, or disease and exhaustion.37 Other estimates put losses at about 3 to 5 percent.38 Interrogations of about 300 communist prisoners suggested a cumulative attrition rate of less than 15 percent, but their information was mostly anecdotal.39

(U) The trail was serviced by the men and women of Group 559, which grew from a few hundred in 1959 to over 50,000 by the end of the war. Another 300,000 full- and part-time labor-
ers worked to keep their assigned portions of the system open. They were reinforced by another 40,000 or so engineers and air defense personnel from the People’s Republic of China.\footnote{50} As many as 10,000 of these military and civilians died to keep the trail system functioning. A memorial cemetery to them built after the war covers forty acres; that was the space needed to hold the headstones of all of those who perished. At the head of the Mu Gia Pass, one of the critical points in the system, and the object of large-scale B-52 raids, there is a huge statue of a figure of a woman operating a gas pump, symbolizing the heroism of the people who kept the path open in face of the Allied air onslaught. In another sense, the memorial statue portrays, with a certain poignancy, the ordinary people and their ordinary tasks that made the Ho Chi Minh Trail a strategic success for the Vietnamese communists.

\footnote{5} When, in 1959, the Vietnamese Lao Dong’s Central Committee 15th Plenum decided to support the struggle in South Vietnam, it committed the resources of both the party and the military to the struggle. Overall control of the infiltration to the South resided with the Central Executive Committee of the North Vietnamese Lao Dong Party. This committee worked with the southern communist political organizations, notably the Nam Bo Regional Committee in the southern part of South Vietnam. Another participating office was the National Reunification Committee (NRC), a Lao Dong party organ that worked at a ministerial level with the DRV’s Ministry of Defense.\footnote{42} The committee also seems to have been charged with the oversight of all matters pertaining to selection, training, and propaganda of the cadre and troops dispatched down the infiltration routes.\footnote{42} Group 559 was the operational PAVN unit charged to oversee the infiltration. As the war progressed, Group 559 was sometimes referred to as the 559th Transportation Group or Division, or the 559th Regiment. It was subordinate to the PAVN General Staff’s Directorate for supply and support services known as the General Directorate Rear Services (GDRS). Group 559 had four basic missions: carry out the transport of men and material to the south; maintain control of the infiltration units; support the current road and trail system and construct new ones; and provide security along the road and trail system.

\footnote{5} The 559th operated with two subordinate transportation regiments, the 70th and 71st, which, in turn, were composed of several battalions of specialized support units: truck companies, heavy equipment and labor units, engineer, infantry, air defense, medical, and communications elements. For the first two years, the 559th had a strength of somewhere between 1,000 and 2,000 personnel. By the late 1960s it had grown to upwards of 30,000. As the war progressed, the 559th accrued as many as forty battalions under its command. The two regiments split their responsibility for the trail. Initially, the 70th Regiment was responsible for the movement of personnel and supplies from southern North Vietnam, near the Mu Gia Pass into Laos as far south as Thua Thien Province in South Vietnam. The 71st Regiment, was responsible for the infiltration network south of the DMZ in Laos, as far south as the tri-border area of South Vietnam, Laos, and Cambodia, opposite Kontum province.

\footnote{5} The infiltration routes did not end at the South Vietnamese border. They extended well into and through the border provinces to the coastal provinces such as Binh Thuan.
(TS//SI) The infiltration and supply system began at various points in North Vietnam. Two major supply-heads, Vinh Linh and Dong Hoi, were the northern terminals from which munitions and other supplies were carried south. From 1959 until late 1963, these two sites also served as so-called intermediate headquarters for the infiltration-associated radio nets. In September 1963, these intermediate HQs disappeared, probably relocating to Hanoi within the facilities of the GDRS headquarters. Vinh Linh remained, but in
(TS//SI) Movement from the DRV to the south was accomplished by a variety of methods. Most troops moved by foot on roads westward towards the Laotian border. Others headed south to cross the DMZ. In the early years, both directions were taken. This duality reflected the early concern by Hanoi that use of Laotian (and Cambodian) territory would necessarily be limited to the movement of small groups because of the uncertainty of an available, sustaining supply capability. The southern route seemed more conducive to infiltrating large numbers of men. At the same time, the southern route obviated the need for disguising the infiltrators. Of course, as the Laotian situation turned to Hanoi’s favor, that alternative to infiltration was preferred to the DMZ crossover.

(U) Both passes, but the Mu Gia Pass in particular, would earn the special attention of the American bombing campaign to stop the southern infiltration. To air force planners, both passes appeared to be ideal “chokepoints,” that, if reduced, could seriously impede the infiltration of troops and supplies to the south. So, a special effort was made to close them. Even the Strategic
Air Command’s monstrous B-52s from Guam Island were brought in. On 12 April 1966, twenty-nine B-52s hit a three-mile strip of the Mu Gia pass with about 900 tons of bombs. MACV HQ in Saigon called the strike a success, but follow-up aerial reconnaissance showed truck traffic moving through the pass within twenty-four hours of the strike. A second strike less than two weeks later by another flight of B-52s experienced the same results: all the bomb craters were filled and traffic was moving through the pass within eighteen hours. In later years, to further sidestep the air strikes against the passes, the North Vietnamese would utilize a more southerly route, which skirted west along the DMZ before turning again south into Laos along Route #92.

This northern part of the infiltration system was, at first, the most developed from an engineering standpoint. That is, roadways were generally all weather—in this case hardened gravel surface with tree logs perpendicularly inlaid for roadbed stability and vehicle movement during the rainy season. Initially, this system of roads totalled about 400 kilometers and utilized the existing roadway system out of North Vietnam into Laos and down to Tchepone. Travel south of Tchepone into South Vietnam, for the first few years, was by foot along a network of trails. In later years, this final southern 500 or so kilometers of the trail would be developed by upgrading various north-south routes like 92, 13, and 23. By 1966, the DRV had built another nine hundred kilometers of truck-capable roads on the infiltration routes. Newer roads often had steel mesh plates or wooden planking with pierced steel anchors. The above map illustrates the road system already available for the trail.

Alongside the roads ran a system of trails. Some trails paralleled the roads while others also spread out, web-like, into South Vietnam. The trails were used primarily for the movement of personnel and were independent of the roads. While the layout and total distance of the trail system was not precisely known, some estimates placed it about a density ten times greater than the roads. Near the border to South Vietnam, the system was extremely intricate. Trails varied in size and capability from about one-half to two meters wide. Some could support bicycle transport. The map on the next page is an example of the estimated density of the personnel trails near the DMZ.

As the Indochina War ground on, the infiltration routes continued to be expanded and improved until around 1973 when it had an estimated nine to fourteen thousand kilometers of roads and trails. Considering that the straight north-south distance from the supply terminals in the DRV to points in South Vietnam measured about nine hundred kilometers, the size and complexity of the Ho Chi Minh Trail were impressive.
(U) The North Vietnamese used a number of techniques to conceal the road and trail system. In the jungles they would build canopies to obscure sections of trails and roads by tying tree
did not move in large formations. For example, the first group that headed down the Ho Chi Minh Trail from Hanoi on 29 May 1959, shortly after the 5th Plenum, was made up of thirty soldiers.

Because of its size, this first group was probably composed of training and staffing specialists for the VC unit. All known infiltration groups for 1959 were composed of no more than thirty men and most likely were made up of the ranks and specialists necessary to flesh out the VC units being formed at the time. These included officers and NCO's (all levels from as high as regiment to squad level), medical personnel (doctors to medics), intelligence and security specialists, radio operators and cryptographers, artillerymen, engineers, and political specialists. Occasionally, civilian Lao Dong Party cadre travelled down the trail.

For the first three years of the infiltration, the men coming down the trail were predominantly, if not exclusively, native southerners who had moved north after the 1954 Geneva Accords.

From the very beginning, the primary political and security concern for the Hanoi leadership was avoiding the discovery of its role in controlling (or coordinating) and supporting the insurgent in the south. To distance itself from culpability, the NRC and CEC instituted a strict program aimed at removing, or at least reducing to a minimum, the North's handprint from the struggle in the south. Personnel selected for infiltration to the south were "scrubbed" prior to departure from North Vietnam. This included removal of all evidence of their northern origins, to include clothing, property, papers, and person-
(U) Group 759 and Maritime Infiltration, 1959-1963

(U) The second leg of the infiltration system set up by Hanoi was the maritime infiltration program. The combined North and South Vietnamese coastline is more than 3,000 kilometers, while the South's alone is almost 2,000. The coastline itself varies greatly, with stretches of sandy beachline interrupted by a number of stream mouths and bays, the largest concentration being the maze on the seaward edge of the Mekong Delta. All of this difficult geography had the makings of an intractable problem for Saigon to solve. An added difficulty was the large private fleet of fishing boats which worked the coastline along the South China Sea. The hundreds of boats and junks operated with little control and were almost impossible to track.

(TS//SI) In July 1959, the Group 759 had been organized under the command of Rear Admiral Tran Van Giang. At first, actual operations was assigned to the 603rd Special Battalion located at Haiphong, which moved military personnel and supplies down the southern coastline. A second organization, the Communications Section of the Lao Dong Party's Research Office, was concerned with the transport of party agents and possibly intelligence operatives along the coast.

(TS//SI) The infiltration of men and supplies by sea required the buildup from scratch of an organization, a logistics and maintenance base, workable and secure procedures, and the recruitment of personnel to run it.

Also, an organization in the south had to be recruited and trained in handling the boats, providing cover, and storing of smuggled material.

(TS//SI) Maritime infiltration routes
Schedules had to be established, as well as a method for warning of Saigon’s (and later American) naval and aerial surveillance patrols.

(U) Surprisingly, in spite of the SIGINT and other intelligence – mostly captured enemy crews and papers from captured or abandoned vessels – the scope and intensity of the communist maritime infiltration system were difficult to quantify. In December 1961, the U.S. navy began interdicting suspected communist sea traffic. A patrol line was established along the seventeenth parallel and was manned by five ocean-going minesweepers supplemented by army and navy reconnaissance aircraft. The first interdiction efforts were meant both to infuse the South Vietnamese Navy with a positive spirit and to allow the Americans to determine the extent and nature of the seaborne infiltration from the North Vietnam.\textsuperscript{66}

(U) Ironically, the Navy brass was skeptical of the size of the infiltration from the north. Admiral Harry Felt, Commander-in-Chief Pacific Fleet (CINCPACFLT), and other officers felt that only small-scale, cross-border movement by sampans was actually taking place and that the current interdiction effort was not really useful.\textsuperscript{67} At this stage, the impetus for continued patrols came
from Secretary of Defense McNamara, who believed that the effort was paying off.

(U) The navy’s skepticism over the scope and size of maritime infiltration carried over to the problem of smuggling from Cambodia. In early 1962, the U.S. Navy reluctantly assumed responsibility for patrolling the route from Cambodia through Phu Quoc island. By March, after “thousands” of junk searches, the navy again concluded that the effort was not productive:

From results attained to date it must be concluded that the patrols have not been effective in capturing infiltrators if significant infiltration is taking place, although the patrol’s presence may have discouraged attempts.68

(U) U.S. Navy ocean-going minesweeper, EXCEL, in interdiction role

It was not until 1964 that a fleet of as many as twenty-six large trawler- and steamer-sized ships, displacing over sixty tons, was utilized in a large number of infiltration missions by Group 125. In reaction to this increased maritime effort by Hanoi, the U.S. and South Vietnamese navies instituted operation Market Time designed to stem the maritime flow of weapons and supplies. In 1965, it was estimated that the communists received nearly 70 percent of their supplies by sea and 30 percent by land. At the same time, the Allied interdiction effort would improve, and by mid-1968, after a series of supply voyages that ended in disaster, the North Vietnamese would halt the maritime mission. It would not resume until the end of 1969.70


(TS//SI) For the American intelligence effort in Indochina – and the signals intelligence portion is included in this observation – the main objective regarding communist infiltration had been to gather enough information to answer these important questions posed by Washington and Saigon. How many communist troops and cadre were infiltrating south? What kind of personnel were moving south, i.e., military, political, technical specialist, etc? Where were they going, that is, into what regions of South Vietnam were they moving? What kinds of material and what
amounts were coming with them down the trail (and, incidentally, by sea)? The answers to these questions would give the staffs in MACV and the ARVN Joint General Staff (JGS), as well as planners in Washington, an insight into communist strength and maybe even help divine Hanoi's intentions. Minimally, knowing the trail system and how it functioned would allow for appropriate interdiction plans to be formulated. Yet, for the longest time, this insight eluded the best efforts of American and South Vietnamese intelligence agencies, including their respective SIGINT missions.

(TS//SI) Throughout the preceding sections of this chapter, much use has been made of SIGINT reports and technical information to explain the origins and subsequent operations of the first four years of the supply and infiltration complex from North Vietnam into South Vietnam. Foremost among the insights derived from SIGINT was the establishment of Hanoi's role in the insurrection in the south.

(TS//SI) However, for the first several years during the American involvement, SIGINT's contribution to the infiltration problem was fraught with seriously delimiting restrictions. The information it supplied was, at best, episodic and fragmentary, and seldom timely. It could not supply any meaningful numbers on the infiltration rates of men and supplies; the identity and roles of the communist personnel coming down from the north were only occasional. Worst of all, the information was often available only well after the fact.
Beginning in about 1960, U.S. cryptanalysts had made some inroads into the various codes and ciphers used by Hanoi and the insurgents in the south. At different times, and to varying degrees, U.S. cryptanalysts were able to exploit encrypted messages of the North Vietnamese political, military, and intelligence entities, as well as the southern insurgents.

However, this was not to happen. Beginning in late 1961, American cryptologists observed that the numerous Viet Minh codes and ciphers they recently had started to penetrate cryptanalytically, had begun to disappear, to be replaced by new, almost unbreakable, systems.

Part of the 1962 change specifically included the appearance of cryptographic systems unique to Groups 959 and 559, as well as some of the special combat units which were either fighting in Laos or providing security along the Ho Chi Minh Trail. To facilitate the switchover in the south, specifically in Intersector V, a cadre of cryptographic specialists had set off south down the trail in September 1959. After a two-month journey across mountains and fording streams, the PAVN cryptographers arrived at the Intersector V HQs to begin the transition over to the new systems.

The result for Allied cryptologists was that any future signals intelligence information on the communist infiltration system, aside from dated material which was finally being decrypted and translated, would be derived solely by exploitation of low-level ciphers and non-cryptanalytic methods, that is, traffic analysis and direction finding. Not that the information from T/A or D/F would be insignificant. Despite a lack of exploitable messages, SIGINT would be able to track the growth of the communications complex that Hanoi was fashioning along the tri-border area of Laos, Cambodia, and South Vietnam, as well as along the DMZ.

The communications structures associated with the southern land infiltration had been uncovered possibly as early as mid-1961 when two Viet Cong radio nets were recovered. One, determined by NSA to be an intermediate headquarters of the Viet Cong Military Network, was located in Dong Hoi in the southern DRV, and was one of the starting terminals for the infiltration route. Dong Hoi controlled four radio...
links. A second net consisted of five links controlled by the HQ of Intersector V (also referred to as Military Region 5, or MR 5), and was located somewhere in northern Kontum Province in South Vietnam.\(^74\)

(TS/SI) In 1963, many changes were made to the communications network to support the increased infiltration effort. Principal among them was the centralization of the overall authority in Hanoi. In September 1963, the Dong Hoi intermediate headquarters relocated to Hanoi and possibly was collocated with the PAVN General Directorate of Rear Services, which was now wholly responsible for the transport of supplies and the movement of the troops into South Vietnam.\(^76\) The Dong Hoi terminal was replaced by one at Vinh Linh which was later suspected to be the HQ for Group 559.

(TS/SI) The two nets involved with the infiltration – the MR 5 and Vinh-Hanoi jointly controlled ones – continued to expand well into the year 1964. The Vinh net almost doubled in size, reaching a total of nearly fifteen stations. The 559th also controlled new subordinate authorities and elements in Laos and near the DMZ. Other intelligence suggested that these stations were final preparation points for elements heading south. Later, these subordinates entities were identified as the 70th and 71st Transportation Regiments.\(^77\)

(TS/SI) However, SIGINT was not providing the type of useful intelligence on the infiltration problem that was needed in Washington. A late 1964 State Department analysis of communist infiltration acknowledged that SIGINT had highlighted increased communications supporting infiltration and had illustrated Hanoi's increasing control over the entire network. Still, SIGINT was judged useful only as support to POW interrogation reports; and, in many cases, it had not been possible, except by inference, to correlate signals intelligence with collateral information on specific infiltration movements.\(^78\)

(U) SIGINT was not alone in being unable to provide answers to Washington's questions about the communist infiltration. The other possible sources of intelligence were unable to contribute very much as well. Aerial photographic imagery flights over the trail, which had begun as early as 1961 with the U.S. Air Force's Able Mable flights over Laos, were useful in getting a kind of "snapshot" intelligence of activity on the trails and roads. These flights were steadily augmented by more capable aircraft, such as the U-2, as the U.S. began to try to fully interdict the communist infiltration with the Steel Tiger, Barrel Roll, and finally Rolling Thunder missions.

(U) The problems detracting from imagery's effectiveness were numerous. The expanse and ruggedness of the terrain perhaps was the greatest hurdle to effective intelligence from the pictures. The fact that only a limited number of planes was available and that their time over any area was determined by the aircraft's speed and altitude made imagery less useful as a device for measuring infiltration rates. Aerial photography, and later aerial observation flights by the likes of the low-level OV-1B (Mohawk) reconnaissance aircraft, helped in targeting truck traffic, but were unsuited for the personnel accounting mostly because the latter utilized jungle trails and paths which were well camouflaged.\(^79\) Besides the inherent difficulties in photographing thick jungle and mountainous terrain, the growing air defense system that the communists were installing to protect the infiltration routes posed an ever greater threat to the reconnaissance aircraft. The slower, lower-altitude aircraft soon had to give way to higher-performance craft. And even
then, the threat was enough to cause a degradation to high-altitude imagery.

(U) Another source of intelligence was the insertion of so-called "road watch" teams, known later under various covernames as Shining Brass and Prairie Fire, which were controlled by the Pentagon, and Gypsyweed, which was run by the CIA. The problem with these teams was their limited observation and reporting capabilities. The extensive scope and nature of the trail system often precluded the teams from being able to gather useful information on infiltration rates. The difficulties in training also limited the number of teams available. The first teams were inserted into Laos northeast of Tchepone. None was placed south of this important terminal, mostly due to the numerous communist units protecting the complex there. All along the trail, the teams often were prevented from approaching the individual trails and roads by active Pathet Lao or PAVN security patrols."
(U) Although all of these categories may seem academic, the Allied intelligence agencies in Vietnam took them seriously and, depending upon their institutional bias or political pressure exerted from command authorities, would espouse whatever count(s) in their order of battle (OB) estimates that suited them. The practical result of such "soft" infiltration figures was that Westmoreland's intelligence office, MACV J-2, the CIA, and other intelligence organs could not determine the overall communist troop strength; not knowing how many troops were coming
down the trail rendered communist order of battle projections difficult, at best.

(U) This inability to determine infiltration rates would later affect the OB estimates developed by CIA and MACV — especially during the famous Sam Adams controversy — since the question of how many regular PAVN troops were coming south was important in calculating the communist troop strength facing Allied forces. By late 1967 MACV would be claiming that it had reached the “crossover point,” that is, the infiltration (and recruitment) rates could not make up for losses suffered in battle. This created the illusion — and one not dispelled by the Johnson administration at the time — that the Indochina War was being won. This illusion was shattered on the morning of Tet. (See Chapter 7, pages 311-313, for more detail on the Sam Adams OB controversy.)

(TS//SI) Beginning in mid-March 1964 and continuing into early 1965, SIGINT analysts plotted an expansion of the communications network supporting the infiltration. The network had expanded to eighteen stations with a definite southward thrust of their locations. Two new subordinate control stations appeared. Both were located in Laos: one near Chavane right on the trail, the other near A Rum at the western end of the A Shau valley. What American analysts saw, especially at the new station at A Rum, was a significant increase in the amount of communications activity exceeding all previous levels.

(TS//SI) What SIGINT had detected, though it could not identify the precise cause, was the change in Hanoi’s approach to the war in the south. In December 1963, after the deaths of Diem and Kennedy, the Central Committee of the Lao Dong Party had met to consider the new situation in South Vietnam. Party secretary Le Duan, who always was an advocate of a stronger, confrontational strategy when it came to Saigon, had urged a greater commitment to the struggle by the southerners. The practical military problem the southern communists faced was the increased firepower of the ARVN forces. With a larger American advisor effort and more numerous, technically sophisticated weapons available, Saigon’s forces had the NLF units at a tactical disadvantage. Furthermore, if the Americans intervened directly, then the prospects of an early victory would evaporate. Then the war would become a protracted affair, not unlike the eight-year struggle with the French. In this case, the southern region would be the major battlefield. North Vietnam would become a “revolutionary base for the whole nation,” which meant, in essence, the supply effort would originate in Hanoi and that there would be the need to send to the south entire regular PAVN combat units to face the ARVN and the Americans.

(U) By the middle of 1964, supply traffic down the Ho Chi Minh Trail increased substantially, including large caches of weapons coming directly from the Soviet Union and the People’s Republic of China. But, more critically, Hanoi finally dispatched the first regular PAVN unit southward. Instead of a mixed bag of cadre, officers, and specialists, to be dispensed among already established VC units, down the trail came the first complete unit of the PAVN, the independent 808th Battalion. More critically for the course of the war, a few months later subordinate units of the PAVN 325th Division started south. Two of the division’s three regiments, the 95th, and 101st, along with its support elements, infiltrated south down the Ho Chi Minh Trail. (The third regiment, the 18th, would arrive a year later.) By early 1965, the 325th had settled just inside the Laotian border across from Quang Nam and Kontum Provinces, South Vietnam.

(TS//SI) There has been a claim that signals intelligence was first to detect the arrival of the 325th Division. Intercept sites did detect increased levels of communications support on the infiltration network. However, the significance of this activity remained obscure to SIGINT
analysts who could not pin any exact meaning to the changes.\textsuperscript{89}

\textbf{(TS//SI)} Actually, NSA had picked up clues to what Hanoi was doing, but, due to the reliability of the source, analysts initially had discounted the possibility of regular PAVN units heading south.

\textbf{(TS//SI)} NSA's position regarding the identity of the new communications network remained equivocal through October even after other collateral reported four communist regular army battalions with supplies and heavy weapons had been moving south along Route 9 in early September.\textsuperscript{92}

\textbf{(TS//SI)} Finally, in early November 1964, SIGINT cleared up the mystery when the radio group in Laos serving the movement changed its signal operating instruction (SOI), or radio operating procedures, to that routinely associated with PAVN operational elements stationed outside the DRV.\textsuperscript{93} Within a month, the first regular North Vietnamese regiment moving through Laos soon was spotted by Allied road watch teams.

\textbf{(TS//SI)} For the next two years, until early 1967, the communications structure supporting the communist infiltration underwent a series of changes designed to increase its flexibility, as well as serve the greatly increased levels of troop and supply movement to the south. The major elements of the change were the introduction of communications broadcast and watch facilities to the network. Operationally, these changes allowed for a round-the-clock communications capability, as well as greater security, since broadcast communications did not require subordinate stations to respond, thereby giving away their positions.

\textbf{(TS//SI)} At the same time, the new communications structure allowed Hanoi to control a greater number of subordinates, as well as create a forward HQ for the 559th Transportation Group in Laos across from the A Shau Valley north of Kontum Province in South Vietnam. At the same time, the communications arrangements permitted the operation of regional nets, such as the one serving the Rear Services HQ located to the east in the same A Shau Valley region.\textsuperscript{94}

\textbf{(TS//SI)} However, beyond defining the outlines of the changing communications structure of the infiltration network, SIGINT was able to produce little else except for its detection of the later infiltration of the PAVN 304th and 320th Divisions in late 1967.\textsuperscript{95} The hard numbers of the communist infiltration from the north that the planners in Saigon and Washington needed still eluded NSA.

\textbf{(U)} The Rest of the Story, Part 2: The Vinh Window and the Breakthrough on the Infiltration Problem, 1967-1968

\textbf{(S//SI)} The situation for American signals intelligence might have remained at this level of traffic analytic exploitation had it not been for the appearance of unenciphered voice communications supporting the communist infiltration. The
adoption and gradual expansion of modern voice communications systems within the North Vietnamese military command and control system allowed Hanoi to transmit more information in a faster manner. Yet, these voice communications led to a substantial increase in vulnerability of Hanoi’s communications to Allied SIGINT exploitation. For, in the search for speedier ways to pass along logistics information from station to station, Hanoi began using simpler cryptosystems.

(TS//SI) The first chink in the communists’ communications security armor occurred in May 1967, when a communications group serving Rear Service entities in the A Shau Valley was first detected using unsecured voice communications. This group’s net, which consisted of a high frequency (HF, 3-30 MHz) voice system using an[^1] to pass messages, belonged to an entity serving Rear Services units in the valley responsible for road security, air defense, and manpower transportation. A month later, this net was firmly associated within the command and control structure of the 559th.[^2]

(TS//SI) What the American intercept operators heard over the radio were Vietnamese radio operators[^3]. This voice net was not quite the hoped for major breakthrough against infiltration communications, but it pointed the way for further exploitation of other voice nets, something American cryptologists had been after since they first arrived in South Vietnam.

(TS//SI) From the earliest days of the arrival of the ASA contingent at Tan Son Nhat in 1961, intercept of communist voice communications had been one of the primary targets for American cryptologists. (See Chapter 4, pages 140-142, for more on the voice intercept mission.) An early

[^1]: A string of very high frequency (VHF, 30-300 MHz) voice intercept test sites had been established near the ASA intercept site at Phu Bai, but they failed to collect any such signals through 1964. It

[^2]: Once detected, the American intercept and processing of voice communications from the DRV mushroomed into a large-scale operation, involving the cryptologic elements from all three services. The intercept bounty was so great that the Vietnamese linguists from the American cryptologic service elements (ASA, AFSS, NSG/Marines) simply soon were overwhelmed. A program utilizing native Vietnamese speakers, with the covername of Dancers, was started to try to fill the gap. (See Chapter 8, pages 381-382, for more on the DANCER program.) Yet, most of this intercepted HF voice was that of Hanoi’s air defense network and revealed virtually nothing about the infiltration.

[^3]: It was not until October 1967 that the breakthrough occurred that allowed for the insight into the infiltration problem that the American cryptologists had been seeking for about three years. In October 1967, an RC-130 ACRP flight (Commando Lance) intercepted Low Very High Frequency (LVHF) voice communications network, located in the southern DRV. Like other Vietnamese voice communications, this network also used a cryptosystem for passing messages
which was exploitable. The communications were determined to have belonged to the GDRS and contained mostly logistics information. The actual source(s) of the communications proved to be the communications-liaison stations, known by their designator as “T-1,” “T-2,” etc., located along the infiltration route south of Thanh Hoa, DRV, down to the large logistics and billet complex around Vinh. These “T” stations were subordinate to the larger binh trams and provided support services to the troops heading for South Vietnam.

(S//SI) The next month, the Vietnamese communist radio operators began sending reports of the movement of military groups, which were soon confirmed as troops heading south. Why the North Vietnamese began to send such information remains unclear. The reports were not from the troops themselves, but from the various *binh trams* and “T” stations situated on the route from Thanh Hoa towards the DMZ. There were thirty-one such stations in the southern DRV. The most lucrative SIGINT source was the voice link between stations T-8 and T-12 just south of Thanh Hoa.

(S//SI) From November 1967 to February 1968, SIGINT identified over fifty such groups heading south. A verification from other intelligence sources identified most of the groups and their destinations. It was not perfect, but it finally established a baseline from which the infiltration rate could be determined. Then, in February 1968 the North Vietnamese changed their notation system, supplanting the three-digit system with a four-digit one. Furthermore, it was quickly determined that the initial digit in the system provided the destination of the group. Using information from other intelligence sources, it was now possible to estimate, with a degree of accuracy previously undreamt of, the number of soldiers infiltrating into South Vietnam and their destinations. This bonanza soon came to be referred to as the “Vinh Window,” named after the southern DRV city of Vinh, which was the large logistics
used to fill in gaps on specific destinations of the groups.103

(13//SI) In response to the extraordinary importance attached to the Vinh Window by the White House and MACV, the cryptologic community piled on the intercept coverage to ensure that anything that could be useful was collected. NSA's aim was to maximize intercept coverage and match the activity levels of the communist voice networks. Airborne collection was considered the backbone of the early effort against these voice communications. Two ACRP flight tracks, optimized for the most efficient intercept, were developed — one over the Gulf of Tonkin and the other over eastern Laos. In the Gulf of Tonkin, Air Force RC-135s (Combat Apple) were used to collect the GDRS communications. To mount the desired coverage meant that the Air Force had to pull existing RC-135s from other bases104

Even with impressing these aircraft from bases around the world into the mission, there was still no guarantee of round-the-clock intercept; by November 1968 the best that could be promised was twelve hours of collection coverage. E0 1.4.(c)

(TS//SI) In order to accommodate the mission over Laos, the Air Force had to scrap plans they had on the board to discontinue the RC-130 missions by the end of the year. The remaining specially configured Commando Lance C-130s would be used in the interim. They would be supplemented and eventually supplanted with C-130s carrying a newer collection system package called Comfy Ears, which was a roll-on communications intercept suite. Comfy Ears had the advantage over the Commando Lance aircraft in that it utilized cargo-configured C-130A and B-versions of the aircraft which were far more plentiful.105

(15//SI) From the very beginning, the AFSS had recognized the importance of timely reporting of the GDRS intercept. It had agreed to onboard processing of significant information to
include transcription, decryption, and scanning of the intercept for items which warranted tactical reporting by the ground control sites. There were two such sites:  

for the Combat Apple and Phu Bai for the Commando Lance flights.\(^{106}\)

\textbf{(TS/\\SI)} However, the onboard processing appears to have been dropped shortly afterwards. There were notable concerns about the feasibility of this mission, mostly due to a lack of onboard technical analytic expertise for both airborne missions.\(^{107}\) The residual expertise, that is, linguistic, analytic, and collection steering, existed at the ground sites. No doubt the lack of enough airframes also dictated this change; there simply could not be the extended coverage until enough aircraft and support personnel arrived. By late November, the Air Force was ready to again try for onboard processing. A test in early December proved that the Combat Apple could deliver the early tactical tip-off. A new ground processing site was set up at the AFSS site at Danang.\(^{108}\)

\textbf{(TS/\\SI)} To compensate for the shortage of airborne collection, certain field sites were selected to fill in the gaps. Studies of the unusual propagation characteristics of the LVHF infiltration radio network

\textbf{(TS/\\SI)} The practical effect of all this coverage was to swamp further the available linguistic capability of all the service cryptologic elements. By early 1969, in order to reinforce the American linguists at Phu Bai, where most of the transcription of the intercept tapes was being done, it was planned to bring in as many Vietnamese language specialists from the other American sites as was possible. A plan to hire more Dancers, native Vietnamese voice intercept transcribers, to beat down the intercept backlog, was rejected.
The effect of the Vinh Window, at least on one level, was to give Washington a view of Hanoi's activities in support of the south that it never had before. With a fairly confident idea of the number of communist reinforcements coming down from the DRV, it was possible to predict the tempo of the fighting.

However, like so many other instances during the war, even this breakthrough failed to live up completely to its early expectations. From the very beginning of the exploitation of the Vinh Window, U.S. tactical commanders had hoped that the SIGINT bonanza would prove to be a targeting windfall for air strikes from both the 7th Air Force in Thailand and the navy's offshore carriers of Carrier Task Force (CTF) 77. Earlier SIGINT exploitation of Rear Services communications had proved to be mostly barren when it came to timely and useful targeting information.

In fact, the early 1968 briefings for intelligence officers, especially those from the navy, had left them with the impression that NSA would soon be able to provide tactically usable intelligence from the GDRS communications. The problem was that this type of intelligence was never realized. The major shortcoming of the Vinh Window intelligence was that precise geographic information, such as kilometer post and benchmark locations, names of identifiable terrain features such as mountain passes, river fords, hill numbers, etc., that would be of use to pilots and target planners in hitting truck parks, troop concentrations, or even the locations of binh trans and comms-liaison stations themselves, seldom was present in the communications. What little that was included in the intercept was often not recognized by analysts in a
timely fashion.\textsuperscript{115} It also soon was realized, shortly after the beginning of the Vinh Window, that North Vietnamese COMSEC practices, especially the use of cover numbers, would deny or delay to U.S. intelligence the locational data that were necessary for targeting.\textsuperscript{116}

\[(S//SI)\] For the navy, and this concerned essentially CTF-77, the carrier task force operating in the South China Sea, this problem would not be solved in 1968. The admirals chafed and made it known that they were “very unhappy” with the lack of support and targeting data from the new GDRS material.\textsuperscript{117} On the other hand, the Air Force chiefs complained that they had reservations with the Army, in this case the ASA at Phu Bai, being primarily responsible for processing the GDRS intercept. They argued that, while ASA may have met the army’s need for ground warfare intelligence, it could not meet the Air Force’s more critical need for real-time intelligence for tactical strikes, and that the ASA should turn over to the AFSS the responsibility for processing the information.\textsuperscript{118}

\[(U)\] In the end, though, these concerns may have been moot. On 31 March 1968, President Johnson prohibited air strikes in the DRV north of the twentieth parallel, hoping that the restriction would act as an incentive for Hanoi to come to the conference table for the Paris Peace Talks. The U.S. Navy mostly was affected by this restriction. It refocused its aerial operations to South Vietnam, primarily its northern or I Corps region, and Laos. The Ho Chi Minh Trail in Laos continued to be an active target for the 7th Air Force flying from its bases in Thailand.

\[(U)\] Then, on 1 November 1968 all air strikes against DRV territory were forbidden. Whatever tactical advantage that could have been gotten from the exploitation of the GDRS voice communications would never be realized. Like the proverbial children at the candy store, American intelligence could only press its face against the Vinh Window and imagine the opportunity. They could watch the North Vietnamese troops and supplies heading south, and even count them; they could even get a count of casualties heading back to the DRV; yet, the true goodies remained beyond our touch. The Vinh Window could never be opened to American tactical advantage.

\textbf{(U) Notes}

1. \textit{(TS//SI)} When exactly the road and trail system came to be popularly referred to as the “Ho Chi Minh Trail” is not precisely known.


5. \textit{(U) Kahin and Lewis}, 113.

7. \textit{(TS//SI)} Ibid.

8. \textit{(U) Olson and Roberts}, 69.


11. \textit{(U) Savada}, 43.


17. \textit{(U) Savada}, 44.

18. \textit{(U) Gaddy}, 117.


21. \textit{(TS//SI)} Ibid.

22. \textit{(TS//SI)} Ibid; also CCH Series XXII.NN. I.E.7
24. (TS/SI) Gerhard, 22.

30. (U) Rust, 55.
32. (U) Ibid., 73.

35. (TS/SI) Gerhard, 22.
36. (U) Olson and Roberts, 239.
38. (U) Schulzinger, 185.

42. (U) Weiner, 36.

45. (TS/SI) Ibid.
79. (TS//SI) Ibid., 5.
80. (TS//SI) Ibid., 5.
82. (TS//SI) Ibid., 61.
83. (TS//SI) Ibid., 4.
87. (U) Actually, the 325th was split in two, with its "A" element, made up of troops drawn from south of the DMZ, moving into South Vietnam. The portion which remained north of the DMZ, designated the 325B, was charged with defense of North Vietnam's Military Region 4, which comprised most of the southern DRV, from invasion and/or raids by the Americans or South Vietnamese.
91. (TS//SI) Ibid.
100. (TS//SI) Johnson, 540.
102. (TS//SI) NIC No. 8-1208, 8.
103. (TS//SI) AFSS to DIRNSA, 3002315Z, 31 July 1968.
104. (TS//SI) Ibid.
110. (TS//SI) NIC-1208.
113. (TS//SI) DIRNSA 29039Z October 1968. OGA
114. (TS//SI) Ibid.; DIRNSA 032242Z.
115. (TS//SI) NSAPAC REP Phil, 032350Z October 1968.