The U.S.—with President Nixon leading the way—is denying just as strenuously that there is any calculated plan to wreck North Vietnam's elaborate system of flood control.

Said the President in a White House news conference on July 27: "If it were the policy of the United States to bomb the dikes, we could take them out—the significant part of them out—in a week."

Next day, the State Department, in an unusual move, released a report on aerial-reconnaissance photos of North Vietnam that showed only a dozen bomb craters on dikes. Even the largest crater, it said, could be repaired in a day with "a crew of less than 50 men with wheelbarrows and hand tools." Highlights of the State Department report are on page 20.

The truth, American officials contend, is that Hanoi—looking ahead to heavy rains in August or September—is seeking to cover up its own failure to repair dikes badly damaged in last summer's destructive floods.

Says one ranking military observer: "Rather than divert the men necessary to make the repairs, Hanoi apparently decided to let the floods come and to blame the U.S.—in advance—for any disaster that might occur."

DELTA'S HISTORY

For a full understanding of the exchange of charges and countercharges between Hanoi and Washington, a detailed picture of North Vietnam's dike system is necessary.

North Vietnam is a country of dikes. A network of between 2,700 and 3,000 miles of them protects the nation from the ever-dangerous Red River and insures the country's food supply by regulating the flow of water to the rice fields.

Dikes play a vital role in the Red River Delta, an ancient rice-producing center. Great quantities of water are channeled by the dikes and spread on the paddies through a system of sluices. Rice seedlings then are planted by hand. When the race matures, the sluices are opened to drain the field. The water is channeled back to the river, and the grain is harvested.

Since centuries before Christ, the North Vietnamese have been at battle with the Red River. Every year, the river rises to flood proportions in August and September, threatening the surrounding countryside where the great majority of the people live and work.

Every year new dikes are added and damaged dikes are repaired in a never-ending process that over the centuries has resulted in a system so complex that no single dike is responsible for holding back flood waters.

Primary dikes—up to 50 feet high, 150 feet thick at the base and 80 feet wide at the top, channel the Red River through Ha Noi and the Delta to the ocean. Other primary dikes on the coast prevent salt water from damaging valuable rice land.

Secondary dikes up to 50 feet thick back up the primary system, so that no one break will overwhelm flood defenses. The smallest dikes—the tertiary system—distribute water to individual fields.

DEFENSELESS?

At first glance, North Vietnam's system appears to be defenseless against air attack. And if actually breached in flood stage, the dikes would unleash billions of gallons of water on Ha Noi and the surrounding countryside, flooding up to 6,000 square miles.

However, U.S. experts liken the Red River Delta to a warship in which watertight compartments virtually insure against destruction by a hit from a single torpedo.

Despite President Nixon's assertion that major dikes could be destroyed in a week, some military strategists figure that all U.S. fighter-bombers in Southeast Asia would have to fly daily strikes for up to two months to effectively knock out the system.

Lang Chi Dam and a half dozen smaller dams upstream from Ha Noi could be destroyed in a day with guided "smart bombs," they say. But it would take repeated hits with 2,000-pound guided bombs to uproot the massive dikes themselves, 15 feet at a time.

Such an operation, U.S. commanders warn, would expose American pilots repeatedly to withering enemy fire, and would divert them from more productive military targets.

"It's just not worth it," explains one general.
ASSIGNED TARGETS

U.S. officials concede that some dikes are being hit during attacks on military targets either on or near the dikes. North Vietnam is so riddled with dikes that it is impossible to do otherwise, they say, even though pilots are told to bomb only assigned targets and to do as little collateral damage as possible.

According to one military man:

“Dikes are an integral part of the country. To put an absolute quarantine on hitting dikes is like telling your kids to stay off the sand at the beach.”

Aerial photographs confirm that the tops of dikes are used by the Communist for antiaircraft guns and missile emplacements, pumping stations for oil pipelines, and storage areas for surface-to-air missiles. Many dikes also are topped by roads which are used by trucks and other military traffic—natural targets for U.S. bombers.

GUIDED TOURS

Western visitors to North Vietnam routinely are taken on guided tours of damaged dikes, and journalists in Hanoi report what appears to them to be deliberate U.S. bombing of the system.

Yet American analysts insist that most of the damage to North Vietnam’s dikes has been caused by last year’s floods, which were among the most severe in the country’s history.

American experts report that four major breaches in primary dikes along the Red River flooded an estimated 1.1 million acres of ricebelt. Much of the primary and secondary systems were silted or undermined, and great stretches of the tertiary were broken.

Radio Hanoi, although it gave no casualty figures, said at the time that the disaster surpassed even the flood and famine of 1946, which killed huge numbers of people.

The North Vietnamese recognize the problem—at home, if not in their international propaganda. Mayor Tran Duy Hung of Hanoi wrote in the publication “New Hanoi” on June 30:

“In some places the repair of the dike portions that were damaged by torrential rains in 1971 has not yet met technical requirements. A number of thin and weakened dikes which are probably full of termite colonies and holes have not yet been detected for repair.”

Despite the obvious dangers, the Hanoi leadership has not diverted the 300,000 or more men, women and children needed to repair the damage. Instead, the labor force has been kept at tasks essential to the North Vietnamese invasion of South Vietnam.

U.S. flood-control authorities say this means that even the normal August-September rise in the Red River will cause some overflow in the Delta region. A heavy rainfall could bring severe floods and widespread damage to Hanoi.

“THE STAGE IS SET”

Most American officials are convinced that the U.S. will be blamed for any flooding. Says one Defense Department expert:

“The stage is set. When the floods come, there is nothing we can do to counter the propaganda that we are responsible.”

Another military man explains Hanoi’s campaign this way:

“The North Vietnamese have lived in the shadow of dikes all their lives. They see bombs cratering a dike, and they know what could happen if there were a concentrated campaign against the dikes. So they are doing some ‘preventive propaganda.’ They are hollering as loud as they can now in an effort to forestall such a bombing campaign in the future—even before the U.S. thinks seriously about it.”

“HEADS I WIN, TAILS YOU LOSE”

Some military commanders worry that the Nixon Administration, in an effort to counter North Vietnam’s propaganda, will so restrict the U.S. bombing campaign that it would be made useless or needlessly endanger the lives of American pilots. Says one officer:

“Hanoi can blame the U.S. for any break in the dike system. At the same time, the enemy would profit from any change in American bombing strategy. It’s a kind of ‘heads I win, tails you lose’ proposition.”
"No Major Dike Has Been Breached"

(The U.S. State Department on July 28 issued a formal statement refuting charges of intentional bombings of dikes in North Vietnam. From the official text.)

In recent weeks Hanoi has tried to convince the world that its elaborate dike system is a direct and deliberate target of U.S. attacks.

This is not true. Photographic evidence shows conclusively that there has been no intentional bombing of the dikes. A few dikes have been hit by stray bombs directed at military-associated targets nearby. The damage is minor and no major dike has been breached. The damage can be easily repaired—in a matter of a few days—and has not been sufficient to cause any flooding. No damage has been observed in the Hanoi area or against the primary dike system protecting that city.

Hanoi no doubt is genuinely concerned about the dike system. North Vietnam's rainy season will soon reach its peak, and damage in the dikes caused by last year's very extensive flooding has not yet been fully repaired.

Dikes are particularly resistant to bomb damage. Those in the primary system could be breached only by a series of overlapping craters across the entire top of a dike, and the lips of the craters would have to be sufficiently lower than the river surface to initiate the flow and subsequent scouring action of water rushing through the breach.

North Vietnam's official press agencies and radio service have repeatedly described alleged U.S. bombing attacks on the dike system. In April and May, the North Vietnamese made more than 40 specific allegations, and on 30 June the official press quoted the Deputy Minister of Hydraulics as saying that 20 bombing attacks had been made on dikes during that month. Foreign diplomats, newsmen, and, most recently, actress Jane Fonda have been escorted to dikes to view damage—most of it around Haldong, southeast of Hanoi.

A detailed examination has been made of photography of mid-July of the North Vietnamese Red River Delta and bomb craters were detected at 12 locations. None of the damage has been in the Hanoi area, where destruction of the dikes would result in the greatest damage to North Vietnam's economy and logistics effort. Nearly all the damage has been scattered downstream from Hanoi, as well as downstream from the areas of major breaks resulting from the 1971 floods.

All identified points of dike damage are located within close range of specific targets of military value. Of the 12 locations where damage has occurred, 10 are close to identified individual targets such as petroleum-storage facilities, and the other two are adjacent to road and river-transport lines. Because a large number of North Vietnamese dikes serve as bases for roadways, the maze they create throughout the delta makes it almost inevitable that air attacks directed against transportation targets cause scattered damage to dikes.

The bomb craters verified by photography can be repaired easily with a minimum of local labor and equipment. Repairs to all the dikes could be completed within a week, as the necessary equipment is available throughout the delta.

Local labor historically mobilizes to strengthen and repair dikes to avoid serious flooding. An occasional bomb falling on a dike does not add significantly to the burden of annual repair work normally required. North Vietnam must, however, complete the repair of damage caused by the 1971 floods before next month when this year's rainy season will reach its peak.

PART V: HISTORICAL INFORMATION ON DIKE BREACHINGS AND U.S. PRECEDENTS

SOME OBSERVATIONS ABOUT BOMBING NORTH VIETNAM

(Memo by John McNaughton, Assistant Secretary of Defense, Jan. 18, 1966; the Senator Gravel, Edition of The Pentagon Papers, vol. IV, p. 48)

... Destruction of locks and dams, however—if handled right (perhaps after the next Pause) offer promise. It should be studied. Such destruction does not
kill or drown people. By shallow-flooding the rice, it leads after time to widespread starvation (more than a million?) unless food is provided—which we could offer to do at the conference table.'"
MESSAGES FROM HANOI

(By Bernard B. Fall)

The late scholar Bernard B. Fall was reviewing two books on Indochina for the Nation. In the section of his review mentioning U.S. bombing of dikes in 1944-45 Fall was discussing “Here Is Your Enemy” by James Cameron:

“... As for the net effect of the bombing raids, Cameron, with his British ‘blitz’ experience, gives what promises to be a correct assessment when he says that North Vietnamese industrialization was not sufficiently advanced to engage more than 5 percent of the population. Its destruction, therefore, would not affect the country as drastically as similar destructions would in the West, but he does not seem to have taken into consideration the possibility of bombing North Vietnam’s major dike systems out of existence.

“When this was done in part in 1944-45 by the U.S. Air Force to keep the crop from going to the Japanese, 1 million Vietnamese starved to death in the North in the ensuing floods and the drought which followed.

“On July 11 the pro-American L’Express reported from Paris that between February and June, 1966, close to 500 small dikes allegedly were destroyed by bombings...”

THE TARGET NOBODY TALKS ABOUT

(By Nina Schwartz and Carol Brightman)

Since February of 1965, the North Vietnamese press has carried reports of repeated attacks by U.S. planes on water conservation works, dikes, dams, and hydraulic systems. Until June 1966 there was little or no confirmation of these reports in the American press. American reports, of course, have labored under the official position that U.S. planes do not bomb non-military targets. A more practical obstacle to objective reporting has been the simple fact that American correspondents must rely solely on an official version of the bombing, delivered in prepared briefings by the U.S. Military Command in South Vietnam. What they describe, they never see. Moreover, only those authorized missions dispatched from South Vietnam, the China Sea or Gulf of Tonkin, can be announced. One-half of the air attacks on North Vietnam are estimated today to originate in Thailand, yet neither their targets, nor their own losses, are reported. It is not hard to understand how attacks on North Vietnam’s water supply might be overlooked. A target such as this, particularly if repeatedly, deliberately chosen, clearly raises a grave question about the ultimate purpose of U.S. bombing in North Vietnam which the United States would be hard-pressed to answer, at this phase of its operations.

In the earliest reports of the bombing of oil depots around Hanoi on June 29, it was noted, almost in passing, that bombs had dropped on the banks of the Red River. Next to photographs of mile-high bursts of burning oil, this fact was generally overlooked. But for those who have been alert to the historical struggle of the people of northern Vietnam to harness their erratic and unruly rivers, this fact takes on ominous significance.

The people of Hanoi, Rene Dumont wrote in Le Monde, July 6, 1965, “know they live beneath the waters of the Red River.” It was this knowledge which apparently was the major cause of the evacuation of Hanoi during the June 1966 bombings. The July 3, 1966 Le Monde reports that evacuation was provoked more by fear of flooding than by direct aerial attacks on the city. These fears are not idle. The same report noted that the river had risen to the high-water level normally reached in mid-August. On July 2, Le Monde predicted severe floods by August if the bombing of the Red River dikes around Hanoi continued. North Vietnam, it stated has already formed a civilian army of 200,000 men and women—“La Nage Arnee”—to patrol the branches of the Red River for ruptures in the dikes.

In a recent report for the American press, the New York Times quoted a recent statement by North Vietnam’s Minister of Water Conservation, which charged that the bombings had intensified “in the midst of the flood season, with a view to causing floods in the most populated and biggest rice-growing areas” (8/20/66).
The Minister stated that between February and June of 1966 there had been 55 attacks on water works, and in July alone, when the rivers were in spate, 69 attacks took place. He singled out a concentrated bombing of irrigation works in the Red River Valley on August 15 as the most severe to date.

What is the ominous significance of this bombing?

For the North Vietnamese, it may be inferred from the following paragraph drawn from a September 15, 1965 Statement by the Ministry of Water Conservancy:

"The Democratic Republic of Vietnam is a tropical agricultural country. Solving the water conservancy problem is essential if the peasants' living conditions, precisely out of its desire to keep our people in utter misery. As a result, each year, the laboring people in the North had often to suffer from food shortage for several months. The food problem has now been given a better solution in the North. This is due to the great and continued efforts made by our people in the building of water conservancy works. In many areas, drought, flood and water-logging have ceased to be a threat. Agriculture is being gradually stabilized and developed, and the peasants' living conditions, steadily improved."

"Rice, the main staple of North Vietnam's rural economy, is an aquatical plant and unable to live without water. The flat rice fields must be surrounded by small dikes to keep a predetermined amount of water in the field. Because rain falls during a limited season, the dikes must be watertight to irrigate the fields until harvest. A break in the dike means loss of the crop. It may mean widespread famine, flood and drought. In past years North Vietnam has suffered from a constant rice deficit; with her growing population, together with the partial mobilization order issued by Ho Chi Minh on July 17, successive ruptures in the dike system obviously increases the deficit to intolerable proportions.

About four-fifths of the villages in North Vietnam are located close to the main rice-growing areas—the Red River Delta and the Thai Binh River. In his extremely informative survey of North Vietnam's rural economy published last year in Le Monde, Rene Dumont (who is himself an agronomist as well as a journalist) emphasized how susceptible the complex dike system was to air attack. "Certainly," he wrote, "a massive mobilization of the population with a super-human effort would be able to repair some of the breaks. But heavy American bombardments hardly allow for reconstruction at a fast enough rate, especially during the rainy season." (7/6/65). Dumont indicated that strikes on water works had not yet taken on a systematic pattern, nor had they exceeded the capacity of the North Vietnamese to contend with them. Yet he saw the general bombing expanding through three phases:

"Bombardments of North Vietnam first had for targets purely military installations, such as radar stations and barracks. Then their focus became bridges, roads used for troop maneuvers, targets which were obviously also part of the economic establishment of the country. The attack last Wednesday [June 30, 1965] on the oil depots was a new blow at North Vietnam: all the more important because it was near Hanoi and because the Red River Delta is no longer safe. Certain observers wonder if the next attacks will not be aimed at the dikes which protect the population and the crops."

Reports from Le Monde have since confirmed Dumont's prediction. These reports are all the more reliable since Agence France Presse established the first "free world" bureau in Hanoi in the spring of 1966 (unfortunately, Jean Raffaelli, the Bureau Chief, is said to have returned to Paris in mid-August, "for a short time"). The French accounts, of course, in no way match the detail of the Vietnam News Agency (VNA) accounts. Typical of the latter is the report that between July 27-31, following heavy monsoon rains, U.S. planes made 14 attacks on sections of dikes along the That-Binh River in Dien Bien and Thai Binh provinces in the suburbs of Hanoi. In this case, as in many others over the summer, the isolation of the dikes from any semblance of military or industrial installation is clearly indicated.

It entails a considerable stretch of the imagination to maintain that these attacks are not deliberate. Long experience with the lack of candor in Administration accounts of what it is doing in Vietnam has taught us to consider its official depositions as politically self-serving and contrary to military fact, until proved otherwise by impartial observers on the spot. In the case of this bombing our suspicion is confirmed by the appalling logic demonstrated in the general escalation of the war over North Vietnam.

An initial rationalization, which maintained that North Vietnamese infiltration into the South was such that it could be cut physically at the source—
visible supply and training bases, and military-industrial installations—has since been discredited by Secretary McNamara himself, most notably in Honolulu last February and at a White House briefing on August 25. The validity of the second rationalization has proved to be impossible to measure and thus inherently expansionist in military terms. It maintains that by virtue of logistic and political support, North Vietnam is the aggressor in South Vietnam, and that she will relaunch this role south of the parallel only if enough bombs are thrown her way north of the parallel. She has reacted in contrary fashion. Whatever the exact importance of her role in the South has been, whatever moderating pressure the Soviet Union has tried to exert, the mass bombing has helped both to define and stiffen her will to resist the terrorist coercion the United States has introduced into the Vietnamese conflict. She is lent support in her intransigence with each new raid. It is here that the peculiar logic of the general escalation becomes apparent.

When selective bombing is used to display vast potential force, and to persuade the foe that it would be wiser to save skin and "confess" at a conference table, and it fails; what next? The display, then, becomes the force itself—which, of course, it always was. Persuasion turns into punishment. Although the South Vietnamese government rationalization of this process lacks the sophistication of the American version, it shows far more imagination and candor:

"Punishment. After the first months of warning, the course of events could change, that is to say, the Vietcong are risking punishment by annihilation. First signs of more extensive industrial and agricultural destruction came with the recent bombing of hydro-electric power plants and dams ("Why Bomb North Vietnam?" Government pamphlet distributed at RVN Mission at the UN; date not given)."

One can be sure that the significance of "agricultural destruction" is not lost on the Saigon government. In the South, where it is regularly practiced by U.S. forces, it takes the form of herbicide: the destruction and poisoning of crops by toxic chemical spray in areas not controlled by Saigon. As in the South, so in the North: it is antipopulation warfare. The target bares the hand; the target is food, or, more exactly in the North, ability to produce and harvest rice.

Does the United States believe that if it can destroy North Vietnam by inducing flood and famine, it can destroy the National Liberation Front? It is unlikely that policy-makers are unaware of the discrepancies between the official charge of North Vietnamese aggression, and the filmsy factual evidence assembled in their White Books and White Papers (see pp. 15-19). Then why the concerted escalation in the North? One reply to this question current today concedes that Hanoi does not lead the NLF, or even provide significant support, but argues, nevertheless, that the United States could accomplish and demoralize the NLF position that southern forces could be easily forced to retreat into sporadic guerrilla action. Another reply suggest that when the United States intensified its bombing of the North, it deliberately began to shift its major strategic interests from the southern battlefield toward an arena where it air power might be more at home. The bull in that arena is said to be China.

Before February of 1965, it was said that China might enter the war if the United States began bombing North Vietnam. Last spring it was said that China would surely enter the war if the United States bombed Haiphong harbour or the oil depots around Haiphong and Hanol. Today it is said that two moves in North Vietnam will force China to enter the war: a ground invasion by U.S. forces; the destruction of North Vietnam's agricultural economy, through expanded bombing of the dikes, dams and irrigation systems.

At present, the bull appears to be chasing the tail.

The South Vietnamese government pamphlet quoted before concludes with a Vietnamese proverb: it is suitable here if one is careful to get the animals straight: "The VO is the fly that gets killed when the buffaloes fight."

**APPRAISAL OF THE BOMBING IN NORTH VIETNAM**

(Report by the Central Intelligence Agency and the Defense Intelligence Agency on the first year of Operation Rolling Thunder (1965); the Senator Gravel edition of The Pentagon Papers, vol. IV, pp. 68-69)

CIA and DIA, in a joint monthly "Appraisal of the Bombing of North Vietnam" which had been requested by the SecDef in August, attempted to keep a

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1 Lest it should appear that the Saigon government maintains that it is the Vietcong who have infiltrated North Vietnam (the propaganda releases oddly suggest this), we should note that "Vietcong" stands for the enemy, North and South.
running tabulation of the theoretical cost of repairing or reconstructing damaged or destroyed facilities and equipment in NVN. In terms of specific target categories, the appraisals reported results like the following:

... Locks. Of the 91 known locks and dams in NVN, only 8 targeted as significant to inland waterways, flood control, or irrigation. Only 1 hit, heavily damaged.

HANOI FOOD OUTPUT HELD TARGET OF U.S. BOMBERS

(Associated Press, report by Amando Doronila in Christian Science Monitor; September 5, 1967; this is an eyewitness report)

... Dikes in the fertile Red River delta—North Vietnam's rice basket—have come under increasing air attack lately. The American bombing appears intended not only to demoralize and harass the population in the most densely populated region of the country, but also to destroy the rice crops in the vast alluvial plains with their vulnerable open spaces... here in the delta region, whose paddy fields provide the bulk of the rice supply of 17 million North Vietnamese, there have been almost daily attacks on dikes along the numerous small confluences of the Red River. ... The pattern of the bombing in the delta seems evident—to interdict agricultural production. No military targets are visible in the dikes. The heaviest artillery pieces we saw were antiquated rifles of the peasant militia...

(From O'Hara Books, N.Y., 1968)

EXCERPTS FROM "AGAINST THE CRIME OF SILENCE"

REPORT ON THE DESTRUCTION OF DIES: HOLLAND 1944-45 AND KOREA 1953

(Testimony by Prof. Gabriel Kolko)

During the final months of the Second World War the Nazis exposed the Dutch civilian population to a form of war crime the United States and English Governments especially designated as crimes against humanity. To prevent the advance of Anglo-American troops, the German High Commissioner in Holland, Seyss-Inquart, opened the dikes and by the end of 1944 flooded approximately 500,000 acres of land. The result was a major disorganization of the Dutch economy and the most precipitous decline in food consumption any West European country suffered during the war. By 1945 the caloric intake in occupied Holland, or the large bulk of the country, was less than 900 a day, and in certain areas 500 calories. As the Allied armies advanced, the Germans threatened to extend the destruction of the remaining dikes to block Allied supply lines and movements. The misery of the Dutch people, the Prime Minister-in-Exile, P.S. Gerbrandy, warned. SHAEF Commander Eisenhower, threatened "... a calamity as has not been seen in Europe for centuries." The Red Cross issued the same warning, and during April 1945 both Eisenhower and Churchill moved to confront the enormous tragedy resulting from the impact of the destruction of the dikes. On April 10th Churchill wrote Roosevelt that "I fear we may soon be in the presence of a tragedy." To prevent it he proposed the Allies make available necessary food and medical supplies for Red Cross distribution. A warning was to be given to Seyss-Inquart and his subordinates "... That by resisting our attempt to bring relief to the civilian population in this area they would brand themselves as murderers before the world, and we shall hold them responsible with their lives for the fate which overtakes the people of Holland." Several weeks later Eisenhower made an additional proposal along the same lines:

I propose to send a very strongly worded message to the German Commander... that the flooding of large areas of Holland with the resulting destitution, starvation and the enormous loss of life to the population will constitute a blot on his military honor... He must be told to cease opening the dikes and to take immediate steps to assist in every way possible the distribu-


tion of food . . . and that if he fails in this respect to meet his clear obligations and his humanitarian duty, he and each responsible member of his command will be considered by me as violaters of the laws of war who must face the certain consequences of their acts." Confronted by such grave warnings, Seyss-Inquart agreed to stop the destruction of the dikes and cooperate in relief measures.

Nevertheless, the barbarism of Seyss-Inquart in destroying dikes and starving civilians made him appear in the eyes of the Western officers as "one of the worst war criminals," and when General Walter B. Smith met with him on April 30, 1945 to arrange for Dutch relief he also warned the German "... you are going to be shot." Of the 185 Nazis indicted at Nuremberg only 24 were sentenced to death. Seyss-Inquart was one of the 24. His crime was considered to be one of the most monstrous of the Second World War, and prominent among the charges against him at Nuremberg.

On May 13, 1948, while armistice negotiations in Korea were bogged down, 20 U.S. Air Force F-4's attacked and destroyed the Toksan irrigation dam in North Korea. The Americans also bombed the Chasan, Kuwonga, and Toksang dams and scheduled the bulk of the remainder for attack—only the signing of the armistice prevented their destruction. The flash flood resulting from the destruction of the Toksan dam resulted in a deluge of 27 miles of valley farm lands. In May 1953, "The production of food in North Korea was the only major element of North Korea's economy still functioning efficiently after three years of war," states the official U.S. account. The Americans were now prepared to destroy it, and quite properly the Air Force concluded that "These strikes, largely passed over by the press, the military observers and news commentators in favor of attention-arresting but less meaningful operations events, constituted one of the most significant air operations of the Korean War." "To the Communists the smashing of the dams meant primarily the destruction of their chief sustenance—rice. The Westerner can little conceive the awesome meaning which the loss of this staple food commodity has for the Asian—starvation and slow death . . . Hence the show of rage, the flare of violent tempers, and the avowed threats of reprisals when bombs fell on five irrigation dams . . ."

Briefly, despite an earlier correct definition of the nature of the war crime inherent in flooding of farm land via destruction of dikes and dams, the U.S. Government within a decade followed the precedent of the Nazis, fully aware of the human and political consequences of their action. The United States has already begun the destruction of the dams of Vietnam, but it has also clearly defined the nature of the action for what it is—a war crime of the first magnitude.

**SIGNIFICANCE OF THE DESTRUCTION OF DIKES IN NORTH VIETNAM**

(Testimony by Fujio Yamazaki)

North Vietnam is an agrarian country. The main product of agriculture is paddy field rice which is grown on the alluvial flats of the Red River, Chu River, Ma River and Ca River. Of this, the Red River Delta—Tonkin Delta—comprises a major part.

The Tonkin Delta is an immense plain, measuring about 150 km from Viet Tri, at the top of the delta to the mouth of the Red River and covering over 1,100,000 hectares. It is 13 meters above sea level at the highest part and 0.5 meters at the lowest with almost no slope. It is divided into many dike-encircled fields by tributaries and subtributary waters of the Red River. These dike-encircled paddy fields are surrounded by a natural dike made by the overflowing of the rivers and by man-made dikes constructed over many years by the work of the peasants. Generally, the relative humidity is low in these dike-encircled paddy-fields. The height of the Red River dikes in the vicinity of Hanoi is 13 meters while that of lower land in Hanoi city is only 4 meters.

The height of ground near the seashore of the delta is only 0.5 meters, as it is reclaimed land with dikes constructed on a tideland. The high tide level rises two meters in the Tonkin Gulf.

The Government of the Democratic Republic of Vietnam attached much importance to river dikes and seashore dikes and made great efforts to have them

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*Coles and Weinberg, Soldiers Become Governors, 89.*

*Dept. of State, Germany, 1944-45: The Story in Documents (Washington, 1950), 117.*

constructed, thereby extending the total length of such dikes to 4,000 kilometers in 10 years.

The low ground of the delta, including the seashore area, cannot be drained naturally and in the rainy season all the land is flooded, so that growing rice in such a season is impossible unless the land is drained mechanically. In contrast, the high ground of the delta suffers from a water shortage in the dry season, and a rice crop without irrigation facilities is impossible in such a season.

During the days of French Indo-China, irrigation facilities had already been constructed over a considerable area. Since the establishment of the Democratic Republic of Vietnam, the facilities have been greatly and rapidly increased, and 90% of cultivated land is now irrigated. The construction of drainage facilities was undertaken for the first time on a full scale by the Democratic Republic of Vietnam, and was marked by great progress in ten years. As a result of the strengthening of dikes and the completion of water facilities, twice a year cropping has been made possible over a considerable part of paddy fields in the Tonkin delta, remarkably expanding the production of rice. This description of the Tonkin delta can also be applied to the alluvial plain of the Ma River and the Chu River. Destruction of these dikes and water facilities by U.S. shelling and bombing carries the following significance:

1) The Case of River Dikes

No explanation is necessary to imagine what the results would be should dikes be destroyed in the flood-water season when the river level is higher than the cultivated land and the urban area. In relation to food production, not only farm products would be damaged but the cultivated land itself would be put out of use by the accumulation of earth and sand and by water erosion. In regard to living, houses would either be carried away or destroyed. Damage suffered by the people in both aspects of production and living would be very serious.

2) The Case of the Destruction of Seashore Dikes

If tide-water control dikes along the seashore are destroyed, sea water would flood the land and the cultivated land would be put out of production by sea water, and the crops would die. Even if the dikes are repaired again, and sea water removed, the soil would be salted up and the following season's crops badly effected. If the destruction of dikes should happen at the time of high water, the risk to homes and other buildings and facilities would be great, as they would be destroyed by the force of the inrush of sea water.

3) The Case of the Destruction of Irrigation Facilities

Destruction of irrigation facilities—dams, water control gates, incidental construction of flumes, etc.—would either damage or make impossible the rice crop in the October dry season. Planting of young rice-plants in the transplanting season is impossible without water, and rice crops would suffer from drought if there is not sufficient water after transplantation. Where dams are high, their destruction would result in heavy damage to men and stock, buildings, and cultivated land.

4) The Case of the Destruction of Drainage Facilities

Destruction of drainage facilities—drain sites, overflow, etc.—would make rice cropping impossible in the rainy season in May in the rice areas. As is seen above, dikes and water facilities in North Vietnam have a very important meaning in production activity and living of all the people of North Vietnam, because North Vietnam is an agricultural country and rice crops are cultivated mainly in the delta area. The destruction of these facilities by shelling and bombing therefore constitutes an impermissible war crime against the Vietnamese people.

SOME FACTS ON BOMBING OF DIKES

(Testimony by Prof. Makato Kandachi)

The bombs used for the destruction of dikes were of about 1,500 kg, and combined with the use of ball bombs. If the destruction of dikes alone was intended, then demolition bombs would have sufficed; but ball bombs, the exclusive purpose of which is to kill and wound men and beasts, were used in combination. Further, after destroying dikes by bombing, additional bombing was conducted against people engaged in repair work. The dike at Traly, Thai Binh province, was bombed twice in 1967 while it was under repair; 52 bombs were dropped and 79-158—72—pt. 3—10
32 people were wounded. In Quang Binh province, the tide water control dike was bombed several times, destroying paddy fields of 1,500 hectares. Of late, bombings were carried out against the Vinh Linh area. These are major examples of U.S. bombing. The purpose is to bring about economic difficulties by the destruction of rice crops through flood, and at the same time to kill and wound men and beasts.

The results of the investigation made by the Second Japanese Investigation Team are given below:

(1) On August 13, 1966, the Red River dike in the vicinity of Hanoi was bombed with a 1,350 kg. bomb, producing a bomb crater 12 meters in diameter and 9 meters in depth. Although the water level of the Red River was at its highest at this time, it was quickly repaired and almost no damage was done.

(2) From October 2, 1965 to June 30, 1967, the vicinity of Bac Giang city, Ha Bac province, was bombed 77 times; Bac Giang city was devastated. In the meantime, the dike in the Thuong river was attacked and destroyed by 100 bombs. Although the destroyed parts were quickly repaired, large scale bombing were done even while repairs were going on. At about 1 p.m. on September 7, 1966, four "mother" ball bombs were dropped.

(3) Although the Red River dike that runs through the suburbs of Hai Duong city was destroyed for 15 meters, it had already been repaired. The dike is located in the suburbs far away from Hai Duong city, with no military target at all in the vicinity, only a church. This fact leads to the conclusion that the bombing was for the sole purpose of destroying the dike.

(4) On July 13, 1967, the dike of the Le Vu river that runs by Ha Thach city, Lam Thau prefecture, Phu Tho province, was bombed by 12 planes. Four bombs hit the dike, and as a result 100 meters were destroyed. A bomb crater 12 meters in diameter and 5 meters in depth resulted. On July 18 the same year Hai Mao was bombed. The investigations of the Japanese team on July 24, showed that there were bomb craters about 15 meters in diameter and 5 meters in depth in 22 places. No bombs had directly hit the dike. It was explained that the height of the dike is about 6 meters and that the water level used to be up to the 4 meter mark at high water. From this, it can easily be seen that the destruction of the dike at high water would bring about serious flood damage. It is also evident that even if the dike itself is not destroyed, destruction in the vicinity of the dike would result in the destruction of the dike because of the nature of the soil in this area which is light and weak in cohesion.

(5) The case of Da Mai dam, Quang Binh province, as told by Mr. Nguyen Hoan, Minister for Water Conservation, is as follows: The Second Japanese Investigation Team visited the ruins of this dam; The dam is situated in the upper stream portion of the Zinh river, about a few score kilometers from the sea. Construction was begun in 1965 and was completed on July 5. It supplies water to 2,000 hectares in Bo Truch prefecture. As soon as the water began to run in the channel, it was bombed. The bombing is being carried on sometimes even now.

Commenting on the denunciation of the Foreign Ministry and the Water Conservancy Ministry of the Democratic Republic of Vietnam that the U.S. forces are carrying on the planned destruction of dikes, killing and wounding the inhabitants, and are trying to destroy food production and transportation," a U.S. Defense Department spokesman said that "this was done by accident by American pilots and should not in any way be interpreted as intentional" (AP dispatch, July 22). But according to our investigation, the bombing by the U.S. is so accurate that it is inconceivable for places which have no target other than dikes to be bombed by chance. It should therefore be judged that the U.S. forces have carried on bombing purposely to destroy dikes and kill and wound the people repairing them.

**BOMBING OF DIKES AND IRRIGATION SYSTEMS IN THE DRV**

*(Testimony by Tetsure Tsurishima, Member First Japanese Commission of Inquiry)*

On our way to Nam Dinh from Hanoi, on the first of January 1967, we, the members of the First Japanese Commission of Inquiry, could see several craters on the dike in Phu Ly, a village of peasants and fishermen, 30 km. from Nam Dinh and 40 km. from Hanoi. The dike was broken up by several craters, each of which was about 7 meters in diameter. Since the water level was so low—during the months of the dry season—that the river bed was visible, the villagers had not filled the craters since the time of the bombardment on October 1, 1966.

On the same day, January 1, 1967, we saw the people repairing the dike in the village of Nam Phong, in the northern part of the province of Nam Dinh. This
dike had been bombed the day before our arrival. Since the water level of the river running through this village was high enough to be touching the canal dikes themselves, the dike had to be repaired immediately after it was bombed. One crater was visible on this dike, and there were two in the river.

There are many other cases of bombed dikes witnessed by members of the Tribunal investigating commissions. And I have here eight different pictures taken immediately after the bombing of various parts of the irrigation system. But what I would like to draw your attention to is the systematic method in which the irrigation system has been bombed.

According to the report which we were given in Hanoi by Mr. Phan My, Vice-president of the Water Conservancy Commission, U.S. bombings and strafing of the entire dike network were exceptionally violent and concentrated in the months of July, August and September of 1966, when the water level was very high. He explained that the following numbers of raids against the dike system had taken place: From February to June 1966: 55 raids—In July 1966: 69 raids—In August and September 1966: 136 raids.

He stated that these raids had attacked many sections of the dikes of the Red River, the Thai Binh River, the Ma River, and the Lam River in the provinces of Thai Binh, Ninh Binh, Ha Bac, Hai Duong, Thanh Hoa, Ha Tinh and Nghe An, as well as in Hanoi; many sections of the sea dikes in Quang Ninh province, Hai phong, etc., were also attacked.

The report entitled "Destruction by the U.S. Imperialists of Water Conservancy Projects and Dike Systems in North Vietnam From March, 1965 to December 1966," published by the Democratic Republic of Vietnam's Ministry of Water Conservancy, describes the air raids against the dike network in Nam Ha province, for example, as follows:

"The big dikes of Nam Ha were raided 34 times between April and September 1966. Nam Ha is one of the most populous provinces and a big rice bowl of North Vietnam. In April and May 1966, it was attacked by U.S. planes 3 times. In July, it was subjected to 7 air raids. In August and September, when the water level rose highest, the number of air strikes was brought to 24. Typical were the raids on August 1 and 3, 1966, against the Kinh Lung dike and flood gate in Nam Dao commune, Nam Truc district, when the water level was high; a section of the dike was so damaged by U.S. bombs that its surface was only 0.80 meters higher than that of the water, and the damaged dike was the only protection of a populous area of Nam Ha province against the flooding of the Red river. On August 3, 1966, the same dike section was again attacked and the danger of the dike breaking was very serious as some bombs had dug 4-meter deep craters in it. In these two days, local people had to muster a huge labor force to fill up bomb craters with thousands of cubic meters of earth and stave off the danger of flooding. The air raid on this dike section killed and wounded many people and damaged many houses and much property of the local people." (p.6)

There are many other similar examples described in this document. For example:

(1) The Water Conservancy System in North Nghe An

"The water conservancy system in the North of Nghe An province serves 5 districts with hundreds of thousands of people. It consists of a key project, the Do Luong dam, and hundreds of smaller water regulating projects. In June and July 1966, the U.S. imperialists launched raids against 12 projects. In June and July 1965, the U.S. imperialists launched 12 attacks against the Do Luong dam, 10 attacks against the flood gate at one end of the canal and against water regulating projects of the system on June 5, 6, 7, 8, 12, 15 and July 8 and 14, 1965. The system including big and small canals, was hit 137 times. In July and August 1966, when the people made great efforts to repair the damaged projects, U.S. aircraft in 18 attacks used hundreds of tons of bombs and thousands of rockets and missiles against the important projects which had just been repaired. In addition, repeated attacks were also carried out. Between March 1965 and September 1966 the water conservancy system of North Nghe An was attacked 178 times in all." (p.3)

(2) The Dike of the Ma River in Thanh Hoa

"The Ma River is a large river flowing through Thanh Hoa province. Important dike sections of the Ma River in Thanh Hoa province were subjected to 24 air strikes between March and September 1966. In September 1966, when there were heavy rains, U.S. aircraft bombed and strafed 17 times important sections of dike on the Northern bank of the Ma River; in two days, September 21 and 22, 1966, they bombed and strafed 8 times, damaging sections of dikes and dams
which were hundreds of meters long, blasting away 25,000 cubic meters of earth. In these two air raids, U.S. pilots savagely dropped steel-pellet bombs on the people, who were filling up the gaps in the dike and dam network after the bombing, and many peasants working on the top of the dike were killed. From July 27 to 31, 1966, due to the torrential rains during the typhoon Ora, the levels of the rivers were mounting. U.S. aircraft then dropped 13 times on hundreds of sections of dike in Tien Lang and Vinh Bao districts, in the vicinity of Haiphong city. Almost aU the important dikes in other provinces: Thai Binh, Hai Duong, Ha Bac, Phu Tho, Ninh Binh, Nghe An and Ha Tinh were subjected to hundreds of U.S. air raids in the three months: July, August and September 1966.” (pp. 6-7)

3) The Chua River Water Conservancy System

“This system serves a production area comprising 6 districts with more than half a million people. Bai Thuong dam, the key project of the above network was bombed 13 times; the water regulating projects and big canals, 31 times. Typical were the, August 21, 22, and 23, 1966, attacks against the Bar-Thach water regulating dam, an important project the purpose of which is to carry water to fields on higher ground. The dam was hit 6 times on August 21 and 22, twice on August 22; 256 bombs fell on the dam and about 100 others on the surrounding rice fields, damaging the dam and flood gates, and drying up thousands of hectares of land.” (p. 4)

4) The Suoi Hai Reservoir of Ha Tay Province

“The Suoi Hai reservoir is one of the bigger water reservoirs in North Vietnam, with a capacity of tens of millions of cubic meters for watering an area of Ha Tay province which used to be arid. Some days before the attacks, U.S. aircraft had carried out many reconnaissance flights. On September 9, 1965, the main project was bombed 3 times, from 6:45 a.m. to 1:00 p.m., with hundreds of heavy bombs. It was bombed again on the following days: September 10: twice; September 11: 9 times, from 8 a.m. to 5 p.m.—September 12: 9 times—September 14: 3 times—September 15: twice—September 16: once.

Thus, the U.S. attacked the Suoi Hai water reservoir 35 times on 7 consecutive days, destroying a part of the dam, nearly breaking it and damaging a floodgate built across the Tich River, causing serious drought while the crops here badly needed water.” (p. 4)

5) The Be Reservoir in Quang Binh Province

“The Be water reservoir of Quang Binh province is under construction. Between March 25, 1965, and September 1965 it was attacked 55 times with 1,033 bombs of all sizes, a great number of rockets and 20 mm shells. In 1966, between June 26, 27, 1966, and August 14, 1966, the U.S. launched 57 attacks. In some months as in August 1965, they launched day and night attacks on 80 consecutive days.” (pp. 4-5)

6) Thao Ba Dam in Yen Bai Province

This was the largest dam under construction in North Vietnam; it was first bombed on September 21, 1966. In 1966, on April 23 and June 22, the U.S. imperialists dropped heavy bombs on the place where workers were working. On July 8, 20 and 21, 1966, they repeatedly bombed the center of the construction site of the main dam where there were numerous workers, killing 30 of them and damaging a large quantity of equipment.” (p. 5)

“Gentlemen of the Tribunal, as you know, Vietnam is a part of the monsoon area and the rainy season comes in July, August and September. These are the months when the water level is at its highest. For example, the rivers of Son La province have an average annual rate of water flow of 3,400 cubic meters per second. During the rainy season, this rate increases to 12,400 cubic meters per second.

One who remembers the great disaster which resulted from the breaking of the dike of the Red River in August 1945 which brought death and famine to two million people, and rendered hundreds of thousands of families homeless, can understand just how serious the bombing of the dikes during the rainy season can be.

One other point on the bombing of the dikes, to which I would particularly like to draw your attention, is that the target of these bombings is nothing other than the dike system itself. The map of the dike system of the Democratic Republic of Vietnam, prepared by the Water Conservancy Commission dealing with the dikes
bombed and strafed from March to December 31, 1966, demonstrates very clearly that the irrigation system is one of the main targets of the bombings.

An accompanying map, prepared by the same Commission, which we submit in evidence to the Tribunal, makes it clear that the bombing of dikes has been directed against the most important rivers and canals, and these rivers and canals are not to be found in the proximity of railroads or main roads. Therefore, one can conclude that the bombings of the irrigation system are not the result of error or accident, but have been carried out systematically and deliberately.

The purpose of the bombardment of dikes and the irrigation system in general is not only to cause floods, but also to disrupt economic development and to demoralize the population.

The irrigation system is so important to Vietnam that the success of both the land reform program and the co-operative system depended upon the extent to which they made it easier to build the irrigation system after the abolishment of the landlords. One of the contributions of the co-operatives to the improvement of Vietnamese society has been the mobilization of the people for the construction of the irrigation system. A similar assessment of the success of land reform, based on its ability to improve the irrigation system, can be made for many other countries in Asia as well.

The tremendous increase in the production of rice in the Democratic Republic of Vietnam has been achieved on the basis of the development of the irrigation system since Independence in 1954. The Vietnamese people have moved over 1,200,000,000 cubic meters of earth, and stretched out the network of river and sea dikes over a land surface of 4,000 km during the ten years following Independence (1955–1965). As a result, 90% of the cultivated area was irrigated, and the irrigation of 80% of rice paddies was provided for through hydraulic works. North Vietnam, which had the lowest yield in the productivity of rice of all the Southeast Asian countries before World War II, is now harvesting a yearly average of four tons of rice per hectare. Five tons of rice per hectare per year is its goal, and we know that it is already producing annually more than five tons per hectare in some areas.

The objective of the bombardment of dikes and other components of the irrigation system is to destroy the achievements of the Vietnamese people, to weaken their determination and to prevent them from continuing to develop their economy...
Under the Communist regime, state expenditures on hydraulic works accounted for over 70 per cent of total annual spending on agriculture. In spite of these efforts the prospect of completely defending the dikes appears to be as remote now as ever before.

The history of the Red River dikes is one of dike breakings. Between 1890 and 1926 the Tonkin delta suffered sixteen major dike breakings. Between 1927 and 1945, in spite of new, more modern works constructed under the French, the dikes broke seven times. Since the 1954 partition, North Vietnam has not had much luck in controlling seasonal floods. Perhaps with the exception of 1956, 1959, 1964, 1965 and 1967, most of the other years have been classified as bad years, during which typhoons, floods and drought dominated. Natural calamities were climaxed by the devastating flood of last year. On Sept. 2, 1971, Premier Pham Van Dong publicly declared: "Flood waters from upstream have caused the water in the entire system of the Red River and Thaibinh River to rise to an unprecedented level, while heavy downpours in the delta caused added difficulties for the defense of the dike system."

The impact of last year's flood is still being felt in North Vietnam. In spite of substantial relief aid from Communist allies, the food shortage situation remains acute. This year, the summer crop was harvested (during May and June) at the time when the whole population was mobilized to support the current military offensive.

It appears probable that North Vietnam will suffer another calamity this year. At least some major portion of the dikes, especially those which were damaged by last year's flood, will be broken when typhoons strike from now through November.

In the past, North Vietnam's population could turn to the South for food relief in times of crisis. In 1945 when floods ravaged the Tonkin delta and the flow of Southern rice was cut off because of war, starvation claimed the lives of over one million persons. Since the 1954 partition, North Vietnam has turned for assistance to the Communist bloc to partially substitute for the traditional Southern rice. Relief for last year's flood was provided by China, Russia, North Korea and East Germany.

North Vietnam must understand, however, that the vulnerability of its economy to the Red River and the dike system will render the prospect for permanently solving the food problem extremely remote. On the other hand, it cannot count on foreign assistance for lasting relief, especially in view of the Sino-Soviet dispute and its effect on the Communist bloc.

Presumably North Vietnam has looked back toward the South for a solution. It is also highly possible that the devastating flood of last September was a determining factor behind Hanoi's decision to go on toward its goal to conquer the South in the spring offensive. In any case, the food crisis of last year certainly helped strengthen the hand of the hawk faction in North Vietnam.

The Red River, the dikes and the vulnerability of North Vietnam's agricultural sector are critically important in explaining Hanoi's determination in the current conflict.
More than any other capital in the world, probably—and maybe in history as well—Hanoi has grown accustomed to living with war. The city takes its lumps less in the heroic style of London during the blitz than in the spirit of New York at rush hour. Life is unpleasant, and there is an evident need to subordinate self to a larger interest. Still, the misery wears a familiar aspect. It comes in short bursts, and people act in the certain conviction that the trouble will somehow be surmounted.

One reason trouble seems routine is that the American bombing is routine. Almost every day around noon, for instance, a pilotless reconnaissance plane flies in to photograph Hanoi. It moves so rapidly that there is no warning of its approach, and there is small chance for hits by either anti-aircraft guns or the surface-to-air missiles, known as SAMs, that the North Vietnamese have received from the Russians. Only the noise of the drone’s breaking through the sound barrier announces its advent. It is a startling noise—like a sudden clap of thunder—but after almost four months of bombing hardly anybody in Hanoi bothers to look up. The drone is dismissed with a shrug as “the noon plane.”

Even serious air raids—the raids of June 27th, July 4th, and July 22nd—have a regular pattern. Danger is first signalled by a pre-alert, broadcast through loud-speakers all over town, which announces that American planes have been sighted approaching Hanoi, usually from the southwest, at a distance of more than fifty kilometres—about thirty miles. A second pre-alert, soon afterward, announces that the planes are within the fifty-kilometre radius. Then, within a few minutes, the alert itself sounds—a long, wailing siren note that rises, dips, and then rises again. Minutes later, the planes come into sight—fighter-bombers, floating lazily and then diving on targets to drop bombs, which can be heard as they explode though not seen as they fall. As soon as the planes are visible, the racket of the anti-aircraft guns begins. Almost simultaneously, the SAMs can be seen, powered upward by rocket engines that give off a faint red glow. During the raid of July 4th, it was possible to follow the glow of a missile until a plane was struck and sent spinning to earth, trailing a cloud of black smoke. More often, the SAMs miss the planes, enter the upper atmosphere, and explode in a puff of white vapor. Then, suddenly, the planes are gone, and the siren is sounded on a steady note, signalling the all-clear. Several of the embassies here record the raids, both on film and on tape. The diplomats play the films and tapes over and over, and there has developed among them a kind of connoisseurs’ taste in raids. One Canadian representative, before playing his recordings of the July 4th raid, remarked to me, “Visually, June 27th was a better raid, but sonically July 4th was superior.” Listening to the recording, I had a chance to clock the raid; from first pre-alert to all-clear, it lasted twenty-seven minutes.

Short though the attacks are, they dominate life in Hanoi. A considerable part (some say forty per cent, some say twenty per cent) of the city’s population has been removed to places of safety, in the mountains fifty miles northwest of Hanoi and elsewhere. Most of the government leaders seem to have left, apparently for a mountain hideout. Large numbers of young children have been evacuated, and the streets of Hanoi seem, by Asian standards, empty of boys and girls; when I went to change money recently at the state bank (a formidable pile that in French colonial days housed a main office of the Banque de l’Indochine), one of the women tellers had with her her little girl, who had come in from an evacuation camp for a couple of days.

As a further safety measure, virtually all public gatherings have been stopped. No films are being shown. The theatres are shut down, as are all museums.
Boating on the Little Lake, a chief recreation spot in downtown Hanoi, has been suspended. The International Club, which has a pool where diplomats used to seek relief from the terrible hundred-degree heat of summer days, has been closed. Sunday Mass at the Cathedral is now said at four-thirty in the morning. The central markets have regulations to discourage shoppers from dawdling over their purchases, and an effort has been made to put decentralized, travelling markets in all neighborhoods.

The extent of the damage done by the bombing is hard to determine, especially for foreigners. We are restricted in our movements, and since even the driving of cars is forbidden, correspondents and diplomats must rely on government-assigned chauffeurs to get around. The general impression among Western diplomats is that, for reasons of morale, the government understates bombing losses. In trips I took outside Hanoi, I saw evidence of considerable destruction and death. The two main bridges leading east from Hanoi to the port of Haiphong have been bombed out, and the port itself is in ruins. All the major bridges on the road leading south to the Demilitarized Zone and the front lines have also been destroyed. The textile town of Nam Dinh, about forty-five miles southeast of Hanoi, has been badly battered, and presumably all towns farther south have been even more badly battered. South of Hanoi, I saw two spots where American bombs had seriously damaged the network of dikes that prevents the Red River from flooding in the rainy season (from mid-May through September): near Phu Ly, I saw a sluice gate that had been smashed; south of Nam Dinh, I saw a dike badly cracked and pitted by bomb craters. The hits were probably accidental, since both sites were close to more likely targets—roads and a railroad. But they did take place, and, in a sense—given the extent of the dikes (twenty-seven hundred miles), the number of bombing sorties daily over North Vietnam (about three hundred), and the probable error made by the pilots (quite substantial, in my judgement)—they were bound to take place. If the hitting of the dikes was not deliberate, it was surely predictable.

On the morning of July 8th, I visited a town thirty-six miles east of Hanoi—a trading center called Hung Wen, with a population of about twenty thousand—within twenty-four hours after it had been struck by American planes. The bombs had hit an area about a thousand yards long and five hundred yards wide in the middle of town. According to the local authorities, eighteen blast bombs had been dropped, along with four anti-personnel bombs; each of the latter contains 192,500 steel pellets, which are hurled through the air when the bomb explodes. Seventeen persons were killed and twenty-five wounded. Forty-three houses were destroyed, thirty-six by fire and seven by the force of concussion. One of the houses destroyed belonged to Vo N.guiyen. He and two of his children were killed; his wife and three other children survived. In the rubble of their home, I met one of the survivors, a married daughter. She had been burned in the attack, and was poking about in a dazed way. Bits of a borlY—her charred jawbone, a handful of hair, what looked like a leg—were lying around, and she was trying to assemble them. She kept muttering, "My brother and sister were innocent."

Another destroyed home belonged to Nguyen Van Lém, a seventy-two-year-old grandfather. He said that he was a Catholic and that his family had been saying prayers when the attack came. His wife, his only son, and his grandson had all been killed. He stood in the rubble, a toothless old man dressed in brownish-red pajamas, and raised his fists to the heavens. "I feel deep hatred against the Americans!" he shouted. "As long as I live, I will have hatred in my heart!"

All sixteen beds in the emergency ward of the local hospital were filled. As I entered, I saw a five-year-old boy, his body covered with burns. There was a thirteen-year-old girl whose left leg had been severed just above the knee. There were two children whose bodies were full of steel pellets from the anti-personnel bombs. The doctor who took me around said as we emerged from the ward, "You Americans say you do not mean to kill people. Why, then, do you use anti-personnel bombs?"

Some sections of Hanoi proper have been bombed. I was shown three public-bathing projects, comprising about five hundred apartments, that had been destroyed in the raids of June 27th and July 4th. The authorities claim that the raid of July 22nd knocked out a water-purifying plant. I was told that hospitals and schools had been hit in raids during the spring. The industrial power plant for the city has been destroyed, and the electric current that emanates from the remaining power plant is feeble and subject to repeated failure. But otherwise Hanoi is remarkably intact. It bears the aspect of a nineteenth-century French provincial capital, very clean and rather drah, with broad, tree-lined avenues and
airy public buildings of reddish or mustard-colored concrete. The working day starts around dawn, breaks at eleven for four hours, and resumes at three in the afternoon for another four hours. At the beginning and end of every break, the streets are filled with men and women going to and from offices, shops, and factories. The men wear sandals, cotton trousers, and short-sleeved sports shirts, usually white and open at the neck. The women are dressed in the traditional ao dai, and they all seem to have the lissome beauty made so familiar to Americans by the women of South Vietnam. Compared with Saigon, where the streets are messy with beggars, prostitutes, peddlers, and families cooking on the sidewalks, Hanoi has almost no street life. The police and the military, both highly visible in Saigon, are rarely seen in Hanoi; even their marking of checkpoints at the city gates—by soldiers in little huts, which they rarely leave—is discreet.

Most shopping is done in the early morning, and the closest thing to a crowd in Hanoi is the collection of housewives bustling about the central market just after dawn. By making huge purchases of food, both abroad and from peasants at home, and by rationing such goods as rice and cloth, the government keeps the prices of necessities within the reach of a consuming public whose earnings average ninety dong, or thirty dollars, a month. Rationed rice (under a system that allows thirty-three pounds a month to a worker, nineteen to a child, and thirty to a government minister) costs about six and a half cents a pound. When I visited the market, beef was going for about forty-five cents a pound, fresh carp for thirty-five cents a pound, dish sauce for twenty cents a pound, and fresh eggs for a dollar a dozen. Pineapples cost twenty cents a piece, tomatoes thirty-five cents a pound. Ducks were being sold, live, at thirty cents a pound.

Goods other than food are bought at government-controlled department or specialty stores. At one department store, I priced soap at twenty cents a bar for a Russian-made brand and forty cents a bar for a luxury item from East Germany; conical hats at eighty cents a piece, plastic raincoats at a dollar a piece, and sleeping mats at forty cents. Sandals cost four dollars a pair, and shoes were on special sale, reduced from eight dollars a pair to six dollars. A short-wave radio cost three hundred and fifty dollars, a Russian-made camera five hundred dollars. Next to the department store was a tailor shop, and there I found shirts selling for three dollars and fifteen cents a piece, and trousers for four dollars and seventy-five cents a pair. Next to the tailor shop was a Western restaurant—the Restaurant of European Dishes. Its menu, which was displayed, in the Continental style, outside the entrance, included a beef dish for thirty cents, an omelette for thirty cents, and stuffed crab for sixty cents. I had some of the crab, and it was very good.

The availability of fresh seafood in a Hanoi restaurant bears on one of the never-ending American arguments about Vietnam. Despite the mining of the harbors since mid-May, and the intensive bombing of all internal transportation lines, North Vietnam is plainly not paralyzed. Large quantities of goods move at a fairly rapid clip all the time. The railways provide the chief means of transport, and downtown Hanoi, where the bombing is relatively sporadic, has become a kind of national parking lot. The railways have been cut at all the major rivers, but at night I saw several trains being pulled by steam locomotives on the lines between bridges. One foreign ambassador told me that on a nighttime trip to Haiphong he had counted seven moving freight trains. I myself have no evidence that a way around the mining has been found, but the Swedish Embassy here recently received a consignment of tonic water sent by sea, and curtains sent by ship to the British mission arrived the other day. Rumors persist that the North Vietnamese are unloading freighter cargoes at sea onto landing craft and other shallow-draft wooden vessels, which pass over the mines without activating them.

Laborious individual effort, systematic and repeated over and over again, is required to keep transport moving. Pontoon bridges have been set up to replace most of the bomb-damaged railroad bridges. Traffic moves in one-way bursts of half an hour each; at fixed times sections of the pontoon bridges are removed to allow passage of river traffic. To supplement the pontoon bridges, ferries—usually barges pushed by river steamers—have been set up at most major crossings. Sections of the railways are constantly being demolished by bombing and are constantly being replaced. Pontoon bridges cannot replace the destroyed railway bridges, but the North Vietnamese move merchandise by rail between bridges, then load it on trucks for the river crossing, and then back on freight cars. The trucks come from all corners of the Communist world—Russia, China, Czechoslovakia, East Germany—and they have been painted brown, numbered, and incorporated into a national fleet. They move mainly by night, with
headlights hooded. During the day, they line the streets of Hanoi, parked in the shadow of buildings or trees and often camouflaged with leafy branches.

Underlying this laborious effort is a furious concentration on the war and its object—reunification with South Vietnam. The foremost official expression of this well-nigh obsessive focus is the last will and testament of President Ho Chi Minh, written in May of 1969 and published at his death, on September 3rd of that year. "Even though our people's struggle against U.S. aggression, for national salvation, may have to go through more hardships and sacrifices, we are bound to win total victory," the testament begins. A subsequent passage asserts:

"The war of resistance against U.S. aggression may drag on. Our people may have to face new sacrifices of life and property. Whatever happens, we must keep firm our resolve to fight the U.S. aggressors till total victory. "Our mountains will always be, our rivers will always be, our people will always be; The American invaders defeated, we will rebuild our land ten times more beautiful. "No matter what difficulties and hardships lie ahead, our people are sure of total victory. The U.S. imperialists will certainly have to quit. Our fatherland will certainly be reunified. Our fellow-countrymen in the South and in the North will certainly be reunited under the same roof. We, a small nation, will have earned the signal honor of defeating, through heroic struggle, two big imperialisms—the French and the American—and of making a worthy contribution to the world national-liberation movement."

The six leading officials of North Vietnam—Le Duan, the First Secretary of the Workers', or Communist Party; Truong Chinh, the President of the National Assembly; Vo Nguyen Giap, the Defense Minister; Pham Van Dong, the Prime Minister; Nguyen Huu Trinh, a Deputy Prime Minister and Foreign Minister; and Le Duc Tho, the Politburo member who sits on the North Vietnamese delegation to the Paris peace talks—have all sworn allegiance to Ho's testament. Parts of the testament are reprinted under pictures of Ho in marketplaces, offices, and other public places. A placard bearing the line "No matter what difficulties and hardships lie ahead, our people are sure of total victory" is situated at a particularly lovely spot on the shore of the Little Lake in Hanoi. When I remarked to my interpreter that that seemed a queer place to put a call to arms, he replied that, on the contrary, it was entirely appropriate. The Little Lake, he told me, was also known as the Lake of the Restored Sword. In the early fifteenth century, at a time when Vietnam was being invaded by the Chinese from the north, the Emperor Le Loi was out boating, and a tortoise surfaced and gave the Emperor a sword. With that sword, the Emperor beat the Chinese. He then went back to the lake and returned the sword to the tortoise. "The lake," my interpreter said, "is the symbol of our will to be a nation."

Another sign of the intense national commitment to the struggle is the Vietnamese radio. The Voice of Vietnam, as the radio is called, is the principal national medium. Among the twenty-one million residents of North Vietnam, there are five hundred thousand private radios and six hundred thousand loudspeaker units to relay broadcasts to the villages and hamlets. "Our main subject is the fight against U.S. aggression," Tran Lam, the director of the Voice of Vietnam, told me. "Our whole program has as its central theme the strength of our people versus U.S. aggression." On one typical morning, broadcasting began at five with a fifteen-minute program for the peasants. The subject, according to Mr. Lam, was "how to achieve high yield in rice cultivation despite the bombing." At five-fifteen, there was a two-part news bulletin. The first part announced "victories achieved in the past twenty-four hours in North and South Vietnam." The second part dealt with "threats to the dikes by U.S. imperialists and the condemnation of their action by the world public." At five-thirty-five, an announcer read the day's lead editorial in Nhan Dan, the official newspaper of the Workers' Party; it dealt with an anti-aircraft unit and the techniques used against low-flying American planes. At five-forty-five, there was a children's program on the subject of "how young people in the country should receive city children who are being evacuated." So it went for the rest of the day. The last program at eleven o'clock was a study of "crimes committed by the U.S. and the lackey Thieu [as President. Nguyen Van Thieu is always called here] in terrorizing the students of South Vietnam." The sign-off, at eleven-thirty, was an announcement of the number of American planes shot down—with a separate figure for hits on B-52s—since the war began.

This ceaseless concentration on a war waged against heavy odds has caused some Vietnamese, particularly in the leadership circles, to see themselves at the
center of world history—a nation anointed to carry the torch of revolution. In a speech published on February 3rd, which is now deemed important as an expression of Hanoi’s decision to launch the March 30th offensive in South Vietnam, Truong Chinh, the Assembly President, called Vietnam “the focus of the basic contradictions of human society.” Nguyen Khac Vien, the French-educated editor of the scholarly publication Vietnameses Studies, with whom I had one of my rare unsupervised interviews, expounded on the theme without any evident self-consciousness. “Vietnam has become the focus of the three conflicts central to the present age,” he said, as though he were stating a known fact apparent to the meanest intelligence. “It is the front line in the fight between colonialists and anti-colonialists. It is the front line in the fight between capitalists and Socialists. It is the front line in the international class struggle between the rich and the people.”

Hong Chuong, an editor of the Communist monthly theoretical journal Hoo Top, made the same point with what seemed to me melodramatic self-importance. I met him in the Hoo Top offices, which are in a pleasant tower-shaped building overlooking a pond. The reception room was decorated with cases full of historical mementoes, including a first edition of Pravda, some medals depicting Lenin and Ho Chi Minh, and some fragments of American bombs. The ashtrays in the reception room were made from bomb casings. I opened the conversation by asking for a few biographical details, and Mr. Chuong told me, “We don’t speak about ourselves, because we consider each individual a drop of water in the ocean of the people. But I can tell you that I am a journalist about fifty years old.”

I asked Mr. Chuong whether he was born in North or South Vietnam. He said, “We don’t make that distinction. Our President, our Prime Minister, and the First Secretary of our Party were born in the South. Our country is one. The problem of partition is a problem that has been made by you American imperialists.”

I asked him to tell me about the Vietnamese approach to Marxism and how it differs from the Russian and Chinese approaches. He said, “Our tradition is one of fighting, and we put it in the framework of Leninism. It is not enough to say that we have been fighting for thirty years. We have been fighting for much longer than that. We have made a contribution to Socialism in military thinking. Let me take as an example our national hero Tran Huong Dao. He rose up against the Mongol invasions two centuries before Columbus. These were the same Mongols who took China and India and Europe. They were defeated in Vietnam. Not once but three times we defeated them. And each time, I may say, we took prisoners and released them—fifty thousand each time. I once read an article by an American comparing Tran Huong Dao with Clausewitz. I think that underestimates Tran Huong Dao. Clausewitz existed in the eighteenth century; Tran Huong Dao was five centuries before him. Moreover, Tran Huong Dao was not only a great military writer, as was Clausewitz. He was also a great general of armies. I think Tran Huong Dao is a head taller than Clausewitz.”

“But you asked about the originality of Vietnamese Socialism. Here is an example. In Russia, Lenin replaced Kerensky and the Czar. Lenin represented the proletariat, and Kerensky and the Czar represented the bourgeoisie and the nobles. But they were all Russians. In China, Mao Tse-tung replaced Chiang Kai-shek. Mao represented the peasants, and Chiang was a representative of the warlords. But they were both Chinese. In Vietnam, however, Ho Chi Minh replaced the Japanese Fascists and the French colonialists. President Ho was Vietnamese. They were foreigners. Our contribution to Marxism is not a question of doctrine. We have creative minds, and we are not stuck on any formula.”

One mistake that the Americans always make is to think that we will do what the Russians did or the Chinese did. In that sense, you are dogmatists. But we follow our own ways, and that is why you are being defeated. If there is a single piece of advice I would give to Kissinger, the adviser of Nixon, it would be: Abandon dogmatism. For instance, in chess you can imagine a board full of pieces where the right move will win. You can also imagine a board where most of the pieces are gone and where the right move will also win. We have, used both tactics against the Americans.”

“I said that I was not sure I followed his argument, and he said, “A baby of two cannot understand an adult of forty, but an adult of forty can understand a baby of two. The United States will be two hundred years old in four years. Vietnam is now four thousand years old. Vietnam can understand the two-hundred-year-old United States. But the United States cannot understand the four-thousand-year-old Vietnam. Nixon said recently that the war had lasted eleven years and
had been hard and long. For us, it has not been long enough. We have been fighting eleven centuries, not eleven years. We fought eighty years against the French. When we came to understand that we would have to fight against the United States, we were sure it would take longer. We thought it would take a century, and we are ready to fight for a century. But Nixon has only two cards to play now. He can destroy Hanoi. That is one. He can destroy the dikes. That is the other. But we are not afraid. Let him play them. After that, he will be defeated."

After that interview, I told Ngo Dien, the official of the North Vietnamese Foreign Office who had finally approved my application for a visa to Hanoi, that some of his countrymen seemed to me positively fanatical in their single-minded attention to Vietnam and the war. He said, "We are not fanatics. If we were fanatics, we would lynch the pilots when they were shot down, not treat them correctly in prison camps. If we were fanatics, you would not be here." He went on to point out that immediate boasting was one response of a small and backward country caught up in a war with a great power, and that another response was to show the special modesty personified by Ho Chi Minh. "The example of our President," he said, "has had a great impact on the Vietnamese people."

Perhaps by accident, perhaps by prearrangement, in everything that happened to me thereafter in Hanoi the softer side of the Vietnamese character emerged. A curious instance occurred at a dinner given for me by the Vietnamese press association. Among the guests was Colonel Ha Van Lau, the officer who negotiated the military cease-fire with the French back in 1954, and a former member of the North Vietnamese delegation to the Paris peace talks—a man whom I had come to know as the toughest of the tough. Colonel Lau is now in charge of the office that investigates what the North Vietnamese call American war crimes. In an earlier encounter during my visit to Hanoi, Colonel Lau had described American depredations against his country in the harshest terms. He had flung out his words contemptuously, the way a Spaniard spits. But at dinner he was another person. We talked about President Nixon's visit to China and his trip to the Great Wall. I said that the President's comments had not been distinguished but that it was hard to know how an American President should respond to the sight of the Great Wall. Someone suggested that he should have written a poem. "Better a song," Colonel Lau put in. He said that songs were politically more suitable to memorable places. He said there was one song that always reminded him of Paris.

The next day, an interview was arranged with Nguyen Dinh Thi, a writer, whose work ranges from a critique of Aristotle to a song that the national radio uses as its theme. One of his novels, "The Dike That Exploded," was a best-seller. As secretary of the Writers' Union, he has been in touch with literary figures the world over. Yevtushenko had been his guest during a visit to Vietnam. "I liked him very much," Thi said. "But he is an actor. I told him, 'You are the Don Quixote of world literature.'" Thi told me that "by tradition and wisdom and the teachings of Ho Chi Minh, the Vietnamese people have developed a spirit of bitter intolerance in a fight." He went on, "Our people are performing now as the victims of barbarism. I regret that you haven't seen another side of us. We are poor. We are used to a hard life. We have typhoons every year. We do the backbreaking work of cultivating rice. Our tradition is that everybody helps everybody else. We respect literature more than war in our country, and there has never been a military caste here, as there was in France. An expression we use all the time is 'Tinh thuong,' which means a combination of pity, compassion, and love. We know that we live on the edges of the great powers. We see that we have to be prudent and modest. We have a great sense of humanity, a sense of the pity of humanity."

At a reception the day after that, I met Ton That Tung, a distinguished surgeon and a relative of the former emperor Bao Dai. Among other things, Dr. Tung has translated into French the works of To Huu, a leading contemporary poet, who works in the Secretariat of the Workers' Party. I told Dr. Tung that some of his countrymen seemed peculiarly harsh to me—as if fighting were the only way they knew of to achieve things. I asked him if there was anything that he found unique in the Vietnamese personality. He said, "You should notice that when we entertain we never lord it over our people—we put them wholly at ease. And we don't have religious disputes; except when foreigners were involved, we had tolerance for all religions."
He asked me what other impressions I had of North Vietnam; I said something about the need to end the war. Feeling that to be banal, I added that the two sides seemed so far apart and that there was so little mutual trust that I was pessimistic about a settlement. Dr. Tung was not so pessimistic. He said, “I know your people are tired of the war. Do you think our people want to go on fighting forever?”

I found that leaving Hanoi was almost as hard as getting there. Only four regular planes a week come to Hanoi; two small Chinese planes with chancy connections through Nanking to Canton and Hong Kong; an Ilyushin 18, run by Aeroflot, which goes out through Laos; and a converted Second World War Stratoliner, which is run by the International Control Commission set up at the Geneva Conference of 1954, and which also goes out through Laos. Bad weather forced two cancellations, but finally I left aboard the Russian airliner. My chauffeur, my interpreter, and a woman guide from the Foreign Ministry who had supervised my entire trip all came out to the Gia Lam airport to escort me through customs and wait for the plane to take off. As we sipped beer and lemonade in the departure lounge, a good cross-section of the foreign diplomats and journalists stationed in Hanoi passed in review. They are cut off from normal Vietnamese life by the language barrier and various restrictions, including the prohibition against driving cars. Much as settlers in the West used to arrange their lives around the pony express, the foreign colony in Hanoi orders its life around the planes from the outside world. Among those I saw were an Arab diplomat, who assured me that a particularly tough statement put out the night before by the North Vietnamese Foreign Ministry was done for domestic consumption, and an East European diplomat, who said the statement showed that revisionism was finally taking hold in Hanoi. A military attaché observed that he had recently been counting the number of anti-aircraft guns parked along the road from Hanoi to Gia Lam; it was down from ninety-six a week ago to sixty-two—a probable sign that the guns had been moved south, toward the front. A West European diplomat observed that though the Paris peace negotiations had resumed, they would probably not get anywhere, because the North Vietnamese did not feel for Nixon the kind of trust they felt for Pierre Mendès-France, who negotiated the Geneva settlement back in 1954. I also saw a Russian diplomat, with whom I shared a bomb shelter at the Foreign Ministry during an air-raid alert, and a Soviet journalist—one of two indistinguishable heavies representing Pravda and Izvestia, who were known to the speakers of English in Hanoi as Mutt and Jeff. As each of these passing acquaintances talked, my guide drew for me on a napkin the ideograms used to denote their countries. I asked her to draw the characters for America, the characters mean ‘beautiful country.’ I wish you Americans would stop behaving in a way that is—I won’t say it. I wish you would start behaving again in a way that is beautiful.”

[From the Atlantic Monthly, August 1972]

NORTH VIETNAM: A VISIT TO A HOSPITAL

(By Anthony Lewis)

Dr. Ton That Tung is professor of medicine at the University of Hanoi and director of the Vietnam-German Friendship Hospital, a university hospital for surgery. He is a remarkable man who symbolizes a rather surprising aspect of life in North Vietnam: amid the overwhelming obsessions of war, a tradition of scholarship and respect for Western thought somehow survives.

We met in his hospital office. In the tropical heat and damp of Hanoi, Dr. Tung was wearing a chic white roll-neck sweater. A man of sixty, he bounded in and out of his chair during the conversation to find scientific papers or write medical terms in my notebook. He spoke French and Vietnamese and English. At one point he referred to a letter to the editor in a recent issue of the international Herald-Tribune. He had been in Paris last January, to receive the honor of a diploma from the Academy of Surgery, and was going again in June for a medical meeting. He mentioned with pleasure that the Frenchman who trained him in Hanoi in the 1930s, Dr. Jacques May, now an American citizen, had flown from Paris to Hanoi in early January.

He waved off an offered cigarette, saying he had read the American Surgeon General’s latest report on smoking. “I’ve made two or three speeches against it here,” he said, “but people always stand up in the audience and say they have
smoked for sixty years and are still alive!" Dr. Tung laughed. "Now there are some reports of whiskey and coffee being damaging. That would be too bad."

Dr. Tung is a specialist in liver surgery. He has developed a new operating technique for cancer of the liver: "I use a method of blocking the hepatic artery to starve the carcinoma cells. I know that in the United States they say that's impossible, but we do it. We started the research in 1962, experimenting first on dogs, and published the results for the first time in 1970." He went to his desk and pulled out a reprint of an article in a French medical journal of March, 1972; a Dr. J. M. Krlvine had tried the Tung liver operation and reported that it worked.

Then Dr. Tung discussed what he said was a dramatic increase in the incidence of liver cancer. "I used to operate on one case a week. Now it is almost one a day. We have compared figures for two periods, 1935 to 1961 and 1962 to 1969, and hepatoma increased by a factor of five." The first period was before the United States began spraying herbicides in South Vietnam; and Dr. Tung suspected that there was a connection.

One widely used herbicide contained the chemical dioxin, Dr. Tung said. Dioxin has been found to cause chromosome mutations responsible for malformations in infants. Now there was reason to suspect, he said, that dioxin could cause cancer, and that its particular target was the liver. He was working with doctors in France, Britain, and the United States to analyze dioxin and establish whether it was a cause of liver cancer. He mentioned that another recent American visitor had taken a liver section from him for Matthew Meselson, professor of biology at Harvard; he wondered whether it had ever reached Meselson. (It had.)

"This is not a question only for Vietnam," Dr. Tung said. "For example, liver cancer used to be very rare in France. But now, in Paris, for every four cases of cirrhosis there is one hepatoma. If we can prove that this kind of element causes liver cancer, that would mean great progress in the study of cancer—and possibly a key for the whole question of pollution.

"So the war in Vietnam could have a worldwide effect—we could learn from it, because it is serving as a testing ground for many things in the destruction of men and nature. Most people who speak on Vietnam talk of politics, but now doctors are beginning to look at the scientific questions."

WAR INJURIES

The tone of Dr. Tung's conversation was never propagandistic through the long conversation. He is regarded, in North Vietnam and outside, as a nonpolitical figure of a scientific eminence that allows him to be that. But it was quite inevitable, in Hanoi in 1972, that the war would find its way into the conversation often.

He was talking about tropical diseases, intestinal parasites, when the sound of airplanes was heard overhead. It was early in the morning, so Dr. Tung said jokingly that they were not American: "They are bureaucratic—they start at ten. So we start work at six."

When I saw Professor May in Paris, we talked about professional things and about the possibility of cooperation between our countries on science after the war. I said that American scientists should know about what is happening in Vietnam. Then there would be a chance that they would help us, and we shall need the help."

"ALL WARS END"

I asked whether, after all that had happened, North Vietnam would want aid from the United States. "Some Americans are helping us right now!" Dr. Tung said. "We fought the French, and now our relations are good. It should be the same with the United States. Nixon will not be in power forever." "All wars must end. The important thing is what happens afterward. We think the American people should see their duty to help. I have found so many fine things in Americans. But I wonder whether people understand the destruction that has happened here. American help is necessary. And those who have destroyed should help to rebuild."

Asked to name the major public-health problems of North Vietnam, Dr. Tung mentioned stomach ulcers and heart disease along with cancer of the liver. "Some say ulcers are related to diet," he remarked, "but I think the high incidence is related to tension—the stress of the war." He said there had been a war of one kind or another here since 1939; Allied planes from China bombed this hospital in 1942, when the Japanese were here."
Heart surgery has been done at the Vietnam-German Hospital since 1958—perhaps a thousand cases so far, Dr. Tung said. Since 1965 the hospital has done open-heart surgery, but there have been only about fifty of those operations. Dr. Tung explained that doctors could do them only during the cold season, from September to February, because in the heat they perspire profusely and there is too much danger of infection. The hospital has no air conditioning.

It is an old and shabby hospital by American standards. With a smile, Dr. Tung pointed out the only elevator, a massive seventy-year-old model. Most of the furniture and equipment are rather dated, but on a quick tour one could see a new French heart-lung machine, an American pump to go with it, Chinese operating tables, a Czech anesthetic device, a Soviet respirator, East German and Hungarian lights.

The hospital has four hundred beds. It is for surgical cases only, with separate wings for children, orthopedic cases, heart and liver surgery, and so on. The windows are taped in case of bombing, some in flower or snowflake designs. There are emergency operating rooms underground, in air-raid shelters with the look of catacombs. The doctors have a library, jammed into a small room, that includes many American and English medical journals and books.

Dr. Tung joked about the physical conditions but evidently did not consider them too important. He said that things had improved a great deal since he first became director of the hospital, in 1955. (That was after the Geneva Conference and the departure of the French, but he did not mention that.) “We did not even have an anesthetic department in 1955,” he said. “I was the professor, and I had four other doctors under me. Now there are eighty assisting doctors.”

In North Vietnam as a whole, he added, there was one doctor for every 200,000 people in 1955; now there was one for every 4000. The figures were hard to believe of a small, undeveloped country that has been at war most of the time since 1955. But then much that happens in North Vietnam is extraordinary, and in this case there was persuasive evidence in the person of Dr. Tung.

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[From the New York Times, May 17, 1972]

HANOI AIDES SAY THEY EXPECT HEAVIER BOMBING

(By Anthony Lewis)

HANOI, North Vietnam, May 16—North Vietnamese officials are telling diplomats and journalists that they expect heavier American bombing and other attacks before long and are prepared to meet them.

“The escalation has just begun,” one official said. “Nixon can go on up other rungs of the ladder. Maybe this building will cease to exist.”

He was speaking in the Foreign Ministry, an imposing legacy of French colonial rule. The official grinned and added, “But we shall just have to adapt ourselves to circumstances.”

MANY LEAVE THE CITY

So far as foreigners can tell, the Government is acting on the assumption that worse is ahead. For example, families whose children have been evacuated from Hanoi have been told to register them for school next September in country areas where they have gone. Most children and old people and many women have left Hanoi—about half the city’s normal million population.

Informed sources said that the second phase of the evacuation—the removal of nonessential industry and services—has begun. If necessary, it is said, two more phases will be carried out—the closing of all industry and finally the removal of all civilians.

In Hanoi proper no bombs have fallen in the last three days, though there have been frequent alerts. Government spokesmen say that the bombing continues elsewhere and that the coast is still being shelled, though there is no way to confirm that here.

The small group of non-Communist diplomats here believe that the pause in the bombing of Hanoi is related to President Nixon’s scheduled visit to Moscow next week.

Several diplomats today expressed concern that the bombing might be intensified if the Soviet Union canceled the summit meeting at the last minute. Last
week's bombing did some damage to the British commercial mission here and reportedly to the Chinese economic mission.

North Vietnamese say that they will continue fighting and stick to their demand for the ouster of South Vietnam's President, Nguyen Van Thieu; no matter what the United States does. It is, of course, difficult to appraise such statements on a brief visit. But experienced Westerners here uniformly say they believe in North Vietnam's determination.

An incident today may indicate the state of mind of the North Vietnamese.

This correspondent was talking with Col. Ha Van Lau, the former deputy chief of mission to the Paris peace talks who now heads the war crimes commission, a Government agency that reports on the effects of the bombing.

Colonel Lau was showing pictures of death and destruction and torn bodies caused, he said, by American antipersonnel bombs and rockets. Suddenly sirens sounded. We went to a public shelter nearby, a concrete tunnel 11 steps below ground—perhaps eight feet. It was a claustrophobic place. The tunnel was about 20 feet long and less than six feet high at the center. Sixty people crowded onto narrow benches at each side or stood in the middle. The alert lasted half an hour.

Everyone in the shelter except this correspondent was Vietnamese and all laughed and chatted throughout.

"You can see how we are," Colonel Lau remarked after a while. "Nixon cannot understand us."

"This is the seventh year of the war of destruction," he went on. "It could last 10 more years and we are still sure we would be victorious."

Colonel Lau was asked whether attitudes would be the same if the coastal blockade of North Vietnam lasted indefinitely, causing shortages of food and raw materials, or if the bombing became heavier. When the question was translated, a plump man in a pith helmet a few feet away commented, "You must not understand the Vietnamese," Colonel Lau said.

"We have anticipated the worse and have all the means to face it. Ho Chi Minh said that Hanoi, Haiphong and other cities would be destroyed but that we could not be defeated—he predicted it."

Among Western diplomats here the big subject of speculation remains what Soviet leaders will do about the mining of the ports.

Some observers suggest that the mining could make North Vietnam more dependent on China. The Chinese previously supplied a large labor force to repair damaged roads and rail lines and may do so again if land transport becomes Hanoi's only link with the outside world.

[From the New York Times, May 21, 1972]

NORTH VIETNAM—HERE THERE IS NO THRESHOLD OF PAIN

HANOI—When Henry Kissinger briefed the White House press May 9 about the decision to mine North Vietnamese ports, he ended by saying that he still hoped for a negotiated settlement. "Even in Vietnam," he said, "there must be some realities that transcend the parochial concern of the contestants."

The briefest visit to North Vietnam would likely revise Mr. Kissinger's hopes on that score. It must be one of the most parochial countries on earth, seemingly wholly concerned with itself and its war.

Listening to the radio in a language one does not speak, one hears again and again—every few sentences it seems—the words MiG-nam Viet-nam meaning South Vietnam. The other familiar word is a name newspapers spell Nhon-Xoa. The papers are all about Vietnam; the news from abroad concerns foreign comments on the war.

This singlemindedness is eerie to someone brought up in the casual non-ideological American tradition. But it is plainly a fact that Mr. Nixon and Mr. Kissinger must consider as they weigh practical possibilities of ending the war. Along with concentration on the one subject, there is an air of supreme self-confidence—at least so expressed and, so far as can be told, quite genuine.

For example, a week ago a young man from Thanhhoa, the most heavily bombed province, spoke about a famous bridge there at Hamrong. During the Johnson years Americans bombed it repeatedly but never cut it. The North Vietnamese claimed they shot down 99 planes at the bridge by 1968 and the young man said, "Nixon added one more last December to round it off."

A few days later the American command announced that Hamrong bridge had been successfully hit. The young man was asked whether he had heard about it.
"Oh, yes," he said cheerily, "I heard it on the B.B.C. But if it is so, they will repair it soon."

The visitor has to rub his eyes and remember that this small country—where carts are still pulled by water buffalo and an overwhelming proportion of the people live the simplest peasant lives—is fighting the United States.

Where does their confidence come from? Most foreign experts on Vietnam cite history as a major factor, and from here that seems convincing. The street that runs in front of the main hotel in Hanoi is named for King Ngo Quyen who expelled the Chinese overlords in the year 938. Another street is named for the Trung sisters who led a revolt against the Han Chinese in the first century A.D.

In an odd way, the country that all this brings to mind is Israel. There, too, history has given the nation determination and self-confidence utterly out of proportion to its size. And there, too, is the basic conviction—often irritating to allies—that the country cannot rely on outsiders but has to take care of itself.

European Communist newspapermen, like the few non-Communist journalists here, find much in Vietnamese attitudes that go beyond determination to fantasm. How, for example, should one react to an experience like the following:

The other day I was invited to the house where the Provisional Revolutionary Government of South Vietnam has its representation in Hanoi—incidentally, the former United States Consulate General. There I met Miss Pham Thi Nguyen, a 22-year-old 'freedom fighter' from South Vietnam.

Miss Nguyen, a plump little woman who talked with great animation and smiled shyly, said American soldiers had killed her parents and eight brothers and sister in a village near Danan, South Vietnam, in August, 1965. At the age of 15 she stole explosives, made a mine and killed seven Americans.

She said she was taken prisoner in 1967, tortured by American and South Vietnamese soldiers. Among other things too grisly to relate, she said they nailed both her hands to a wooden table. She was eventually rescued by guerrillas, she said, and joined them. She won designation as an "intrepid fighter" after personally killing 21 Americans. In 1969 she walked to Hanoi—500 miles in three months.

Propaganda? Of course. Could there nevertheless be some truth in it? Judging by Miss Nguyen's demeanor as she told the bloodcurdling story, yes. There are horrors enough on both sides of this war: After Mylai we know anything can be true.

But there may be a different point to make of that conversation. It lies in the very fact that it was considered useful to tell such a chilling story. All wars brutalize, but there can have been few as brutalizing as this.

Even without individual atrocity stories there is reason enough for the average Vietnamese to feel bitterness. I saw Halphong last week and part of it— Including a hospital, a school and extensive housing—have been flattened like Coventry.

The official figure of deaths from daylight raids April 16 is 244, but some Western diplomats think well over 1,000 may have died.

In these circumstances—and other examples of civilian destruction abound—it is improbable that most Vietnamese continue to make a distinction between "aggressors" and other Americans. Strangers generally are treated with courtesy and kindness.

Another extraordinary fact is that the country is prepared to take more destruction. Or at least many people say so, and convincingly. Officials say they expect a further American escalation in due course. With that in mind, they have ordered most Hanoi residents to evacuate to the countryside. Families have been told to register children in school for next September at the villages where they have gone.

In practical terms for Henry Kissinger, all this means that counting on the North Vietnamese to be "reasonable" and fit into some neat global package is almost certainly misguided. There is simply no Western observer here who thinks Hanoi will give up its basic demand that President Nguyen Van Thieu resign from the Saigon Administration.

One non-Communist observer here put it: "This is the same for them as 1940 for Britain. Or maybe it is something more. I've never met people like this. The threshold-of-pain theory does not work."
APPENDIX VI. SELECTED PRESS REPORTS ON BOMBING OF NORTH VIETNAM

[From the Washington Post, May 19, 1972]

U.S. CITES HEAVY N. VIET BOMB DAMAGE

(By Lee Lescace)

SAIGON, May 17 (Wednesday)—American bombers have cut North Vietnam's road and rail network at 71 points, destroyed or damaged scores of boats, warehouses and railroad cars, and damaged the country's main air defense headquarters near Hanoi since President Nixon ordered the interdiction of North Vietnam's supply lines on May 8, the American military Command announced Tuesday.

In a lengthy "preliminary bomb damage assessment," the U.S. Command said the results of the strikes against North Vietnam's surface transportation lines included the destruction of or heavy damage to eight bridges. The report said 1,800 sorties have been carried out over North Vietnam since the interdiction campaign began.

No major new Communist attacks were reported in South Vietnam by government military spokesmen. The battle at Anloc, 60 miles north of Saigon continues with heavy exchanges of artillery and rocket fire and with Communist troops still occupying the northwest portion of the town.

Around Hue and Kontum where large-scale North Vietnamese attacks are still expected, there was little fighting reported.

The first detailed account of the new American bombing campaign against North Vietnam code named "Linebacker" shows that targets have been struck from 50 miles north of Hanoi to the Demilitarized Zone.

More than 128 trucks and 31 field guns have been destroyed or damaged and seven surface-to-air missile sites have been demolished and another damaged, the command said.

Principal targets, however, have been the railways and roads in keeping with President Nixon's order to prevent supplies from reaching North Vietnamese troops fighting in northern South Vietnam.

The six-page catalogue of targets destroyed or damaged includes: 65 boats, 182 railway cars, 40 warehouses and North Vietnam's petroleum pipeline to the south.

The report said several structures at the North Vietnamese air defense headquarters at Bachmai airfield a few miles south of Hanoi were destroyed in a raid by Air Force Phantoms. Soviet technicians have been known in the past to be working at Bachmai. During the height of the bombing campaign against North Vietnam in the administration of President Johnson, reliable sources said several of the Soviet technicians were killed in U.S. raids.

The impact of the interdiction campaign is not expected to be known for 30 days, a U.S. Command spokesman said. The North Vietnamese are believed to have stockpiled a month's supply of fuel for their tanks and vehicles near the battlefields in the south.

During the bombing of the late '60's, North Vietnam mobilized the peasantry to repair damage throughout the countryside. China sent a 50,000-man force to maintain the rail system in the northern part of the country. By one way or another, North Vietnam was consistently able to keep much of its transportation functioning.

During the air offensive, which has included strikes at Hanoi and the port of Haiphong, North Vietnam's two major cities, seven U.S. planes have been lost and 11 North Vietnamese MiGs have been shot down, the command said.

Each day since the President's speech on national television an average of about 260 sorties have been flown by U.S. Air Force and Navy jets over the North.

(150)
U.S. B-52s, which have been credited by South Vietnamese and American military officials as playing the most important role in checking North Vietnam's current offensive, kept flying roughly one mission an hour against targets in South Vietnam as they have done in recent weeks.

All but two of the 25 B-52 missions flown in the 24 hours ending at noon yesterday were around the three major battle areas of the offensive—Anloc, Kontum in the Central Highlands and Hue and Quangtri near the Demilitarized Zone.

The two exceptions were strikes at targets 37 miles southwest of Saigon where the Mekong Delta borders Cambodia in Kien Long Province.

South Vietnam has stripped the Delta of more than one division of troops in order to reinforce its defenders around Anloc, and recently there have been intelligence reports that the North Vietnamese are infiltrating back to some of their strongholds in the Delta.

The Communist offensive has not yet included major efforts in the Delta where more than a third of South Vietnam's people live.

However, military sources believe there is a good chance the Communists will try to take advantage of the reduced government military strength in the Delta before the current offensive is over.

In the Central Highlands, North Vietnamese forces have again cut Highway 19 which connects Pleiku with the coastal city of Quinhon by blowing a culvert. [Enemy troops destroyed the main ammunition dump in Pleiku early Wednesday, rocking the Central Highlands capital with a series of artillery explosions that were still going off five hours after the attack, AP reported. There was no information available on casualties.]

The airfield at Kontum was hit during the night by 15 to 30 rounds of 1.22-mm rocket fire. One South Vietnamese C-130 transport plane and two U.S. helicopters were destroyed. Three Americans were injured.

South Vietnamese infantrymen who landed at the ruined Firebase Bastogne 12 miles southwest of Hue Monday were reported Tuesday still combing the area looking for Communist units and supply caches. They reported killing 78 North Vietnamese in two separate actions in the area, according to a South Vietnamese military spokesman.

South Vietnamese commanders have no intention of trying to rebuild Bastogne into a defensive position. It was largely destroyed by air strikes after its garrison pulled out April 29 under Communist pressure.

However, military sources in Saigon said the commanders hope to continue sweeping the area in an effort to keep the North Vietnamese off balance and to provide early warning should the Communist troops begin a major advance toward Hue.

[From the New York Times, July 8, 1972]

BOMBING TERMED HIGHLY EFFECTIVE

PILOTS REPORT MORE DAMAGE TO NORTH SINCE APRIL THAN IN YEAR UNDER JOHNSON

(By Joseph B. Treaster)

SAIGON, South Vietnam, July 6—Senior United States air officers say American pilots have inflicted more damage on North Vietnam since April than they did in a full year of President Johnson's heavy bombing campaign.

Rather than stepping up the air war gradually as President Johnson did, President Nixon has bombed with great force almost from the time he renewed regular air raids on the North in early April. He has tried to cripple North Vietnam's transportation and power systems and to destroy its fuel stores and its capacity to produce steel. He has also mined the seasports for the first time.

Senior officers here say they have been given more operational flexibility than they had from 1965 to 1968, when President Johnson was running the air war against North Vietnam under the code name Rolling Thunder.

"In two months we've destroyed more targets than we did in a whole year of Rolling Thunder," said one high-ranking Air Force officer in an assessment characteristic of those expressed by senior Air Force and Navy officers in a series of interviews here.

Another Air Force officer, referring to Mr. Nixon and the officials in Washington who control the air war, said: "Of course, they give you priorities and indicate things they consider important. You get plenty of guidance, but they give you the flexibility so that you can get the job done."
"Back in the old days," the officer continued, "they'd select a couple of targets and say: 'O.K., these are the targets you're going to hit next week. Period. That's all you're permitted to hit.' And if those targets happened to be in an area where the weather was bad, that's too bad. No bombing was done.

"Now," the officer said, "they give us a whole shopping list of targets and let us decide when to hit them."

Senior officers say that with fewer limitations and more advanced equipment and weapons—especially the new "smart" bombs, which are guided to pinpoint accuracy by either laser beams or television—they are subjecting North Vietnam to "a whole new order of magnitude of war."

Fewer American planes are flying over North Vietnam now than at the height of the air war under President Johnson, they say, but more 2,000-pound bombs are being used and the total tonnage is about the same.

**DESTRUCTION IS GREATER**

Because of the smart bombs, which Air Force efficiency experts say are 100 times more effective than nonguided bombs, the destruction is much greater.

As an illustration, senior officers point to the heavily defended Thanhhoa bridge, which pilots using smart bombs knocked out on their second try in early May.

When conventional bombs were used against the bridge during Operation Rolling Thunder, an Air Force officer recalled, "we put in over 1,000 sorties and never put it out of commission."

"We lost 30 aircraft and never damaged the superstructure," he added.

No aircraft were lost in the strikes on the bridge this time and over-all losses during the current campaign, called Operation Linebacker, have been lower than they were during Rolling Thunder, despite much heavier antiaircraft fire.

The officers attribute this to improvements in the principal attack planes—the Air Force F-4 Phantom and the Navy's A-7 Corsair—to advances in electronic gear that counters radar-controlled automatic weapons and surface-to-air missiles, and to the experience acquired by air commanders during operation Rolling Thunder. Another factor, the officers say, is that the smart bombs can be dropped from higher altitudes, permitting pilots to stay out of range of some of the most effective antiaircraft guns.

Senior military men and some Western diplomats believe that President Nixon has put Hanoi under greater pressure than ever with the intense bombing, the mining of the ports and his visits to China and the Soviet Union.

A diplomat who studies North Vietnam from Saigon said: "Hanoi seems to be experiencing "a significantly higher level of problems" since the resumption of the air war and added: "The North Vietnamese are clearly suspicious and uneasy about the effects of President Nixon's talking to Peking and Moscow."

At a news conference on June 29, Mr. Nixon said that the mining and bombing had caused a complete turnaround on the battlefield in South Vietnam, where in April and May it seemed that Saigon's troops might be overwhelmed.

**AIR STRENGTH INCREASED**

Senior officers here feel uncomfortable about disagreeing with the President, but they say it is too early for the campaign in the North to have had any significant impact on the battlefields in the South.

The North Vietnamese are still attacking with Soviet-made tanks that require enormous amounts of fuel and are still firing heavy 130-mm. artillery shells.

One development that might diminish the effectiveness of the mining of the ports is the installation of a fuel pipeline from Hanoi to the Chinese border. American intelligence officials in Washington said last week that the North Vietnamese had either completed the pipeline or were completing it.

Many officers in the Army as well as the air services say that the South Vietnamese may have been saved from defeat by the extremely heavy direct air support—bom bardment of advancing troops and tanks.

While Mr. Nixon has continued to withdraw American ground forces in South Vietnam during the Communist offensive, he has sharply increased American air strength in Southeast Asia. There are now nearly 900 fighter-bombers at seven bases in Thailand and on aircraft carriers offshore. In addition, there are about 200 B-52 Stratofortresses on Thailand and on Guam.

An average of about 270 American fighter-bombers strike in North Vietnam every day and there are rarely fewer than 300 operating in South Vietnam. On
several days during the heavy fighting in May there were more than 400 strikes in the South.

As the North Vietnamese menaced Hue again last week, the United States mounted attacks on some days with more than 90 B-52's, each carrying up to 30 tons of bombs.

When the commanders feel the B-52's can be spared from duty in the South and when there are targets that call for saturation bombing—a large camp or a sprawling storage complex—the planes are also used in North Vietnam.

None of the officers interviewed said they expected Operation Linebacker to stop the flow of men and supplies to the South completely. But some Army generals said they believed the bombing might cause the North Vietnamese to abandon the conventional war they have been conducting with heavy machinery and revert to guerrilla tactics.

"We've taken out virtually all of their power," said an Air Force officer as he went through a big loose-leaf album of glossy pictures of shattered buildings and bridges.

"We've taken out major warehouse storage areas, particularly those associated with trucking," he continued. "All the trains on the two main lines leading to China are stopped. We've got 15 bridges out on the northwest rail line and 14 out on the northeast line.

"Nothing is moving, starting with the Paul Donner Bridge right in Hanoi itself. We've destroyed innumerable depots."

The officer, who had closely followed Operation Rolling Thunder, added: "It took us three years to get to the point where they were hurting for power. We were never able to really interdict the railroads. They were rebuilding the bridges faster than we could knock them out. Now it's no problem to stay well ahead of them."

**HANOI TELLING DAMAGE**

In a statement transmitted by the North Vietnamese news agency on June 30 and monitored in Hong Kong, the Mayor of Hanoi was quoted as saying that bombing in the North Vietnamese capital had destroyed "a large number of hospitals, ships and residential quarters of workers" and killed "hundreds of civilians."

The United States military command here, in keeping with its long-standing policy, refused to comment on the North Vietnamese charges. But senior officers and pilots say they carefully study targets and plan their strikes so as to minimize injury to civilians. They also deny accusations by Hanoi that dikes and dams have been bombed.

At his news conference, Mr. Nixon said that eyewitness reports that dikes and dams had been damaged had been checked and "proved to be inaccurate."

"I do not intend to allow any orders to go out which would involve civilian casualties if it can be avoided," the President added.

In a discussion with newsman last week an Air Force colonel who commands a fighter-bomber wing based in Thailand made clear that in the kind of war the United States is conducting against North Vietnam civilian casualties cannot always be avoided.

A newsman asked about the bombing of the Thanguyen steel mill, 80 miles north of Hanoi, on June 23, saying that he presumed it had been full of civilian workers.

The Air Force colonel replied, "Well, it would have to be but I think, you know, they were not the target. I mean that's just the unfortunate thing about war."

**[From the New York Times, Aug. 12, 1972]**

**DIKE BOMBING DENIED BY U.S. CARRIER PILOTS**

(By Joseph B. Treaster)

Aboard U.S.S. *Saratoga* in the Gulf of Tonkin, Aug. 8—The pilots aboard this aircraft carrier swear that they have never tried to bomb the dikes of North Vietnam and that they say they are hurt and irritated that so many Americans at home do not seem to believe them.

The pilots are troubled, too, they say, that some Americans apparently think they are deliberately bombing other civilian targets like schools and hospitals and residential areas.
"The thing that hurts us," said Comdr. Richard Bardone of Pittsburgh, the stocky, curly-haired leader of the pilots on this ship, "is that we make every effort to avoid the dikes. We do not, absolutely not, go after dikes."

Lieut. Comdr. Lew Dunton's eyes flashed, "There are a lot of prisoners in the Hanoi Hilton," he said, "because they were shot down trying to avoid civilian targets. It really galls me."

The pilots and their senior officers scoff at the foreign visitors to North Vietnam who have been quoted as saying they have seen dikes damaged by bombs and that they believed the United States had "deliberately tried to destroy the dikes."

The airmen argue that only isolated damage has been reported—the kind that might likely result from an accident—and they say none of the visitors so far appears to have been qualified to determine whether the damage was done by bombs or other explosives.

"The absurd part about it," one senior officer said, "is that somebody comes up with a hole in a dike and he translates that as meaning we're going after the dikes."

"If we were hitting the dikes with malice aforethought," the officer continued, "we could clean all of them out in a week without many bombs."

The dikes, the pilots say, are not in well-defended areas and "they'd be a piece of cake."

It seems important to the pilots that they be believed. They put their lives on the line every day and they stand together under an old-fashioned code of military honor. They see themselves as patriots in the service of their country and their President. They would like to have been respected and appreciated. Now they will settle for being believed.

They insist that the President has proscribed the dikes as targets and that they have sometimes increased the risk to themselves to comply with his orders.

An insight into the minds of the pilots came from one senior air officer who said, "Probably the best reason for not hitting the dikes is the fact that the President of the United States has advertised to the whole world that we were not hitting the dikes and we don't want to make a liar out of him."

Not only are the pilots under standing orders not to bomb the dikes, they say, but before each mission they are specifically told again to stay away from them. During prestrike briefings, the pilots say they pore over detailed maps and reconnaissance photographs. Dikes and other "no-no's"—hospitals, churches, clusters of homes and P.O.W. camps, for example—are pointed out and the paths for approaching and departing the targets are planned so as to minimize "collateral" damage.

In some instances, the pilots say, the North Vietnamese have incorporated into the dike system roads, gun positions and missile sites which the United States generally regard as fair game. But, the pilots say, these targets are "off limits" when they are on a dike.

Still, Bardone concedes "there can be mistakes, especially in a hot environment—where there is heavy antiaircraft fire."

"There is a possibility of a dike being hit," he said. "But I think this is very remote. If it did happen it would be purely accidental."

One pilot on the Saratoga is said to have reported that he accidentally bombed a dike, but reconnaissance photographs showed no damage.

Discussing the effect of the bombing on the civilian population of North Vietnam, Commander Bardone said, "most of the targets are isolated, but some are near the civilian population. There is a tremendous amount of secondary explosions and there is debris. There is a lot of overflow and I'm sure this gets over into the populated areas."

"I can't say absolutely that we do not put bombs outside the target area," he continued. "If we put a bomb a couple of hundred feet away from the target it might get into civilian areas. But I'd say 99 per cent of the time it's debris overflow that gets into the civilian areas."

The pilots say that the so-called "smart bombs" that are guided by laser beams and television have greatly reduced the margin of error in bombing. But, they add, even the smart bombs sometimes go astray.

It is routine procedure for pilots under attack by enemy planes to jettison their bombs so they can pick-up speed. These bombs are not armed and are not supposed to explode when they land, but since they weigh several hundred pounds they may have damaging impact.

Another danger to the civilian population, the pilots say, is debris and flak from North Vietnamese antiaircraft guns and missiles. "It all has to come down,"
said Commander Dunton; who is from Melrose, Mass. "and sometimes it comes down on their heads."

At least once foreign diplomats in Hanoi have said that damage attributed by the North Vietnamese to American planes had actually been caused by Communist missiles.

Citing an example of the official concern for civilian casualties, one senior officer said that before the first big raid this year in the Hanoi-Haiphong area, the attack plan was routinely reviewed in Washington and "they knocked off some targets—some damn fine targets, because they were too close to civilians."

Lieut. Comdr. Grady Jackson, a bombardier-navigator from Indianapolis, said that he and his pilot turned back from a target in the vicinity of Haiphong a few weeks ago because they felt it was too close to civilians.

The pilots know, though, that no matter how painstaking they are, some civilians are likely to be killed.

"Let's face it," said Commander Dunton, who is a boyish-looking 82, "some of the military targets are probably manned by civilians. If you rolled in on the Boston navy shipyard there'd be a lot of civilians hurt. But they are working for the Government war effort. We don't go after those people in their suburban homes and supermarkets."

[From the Boston Globe, July 28, 1972]

**US REPORTedly Considers Using Drones as Bombers**

**SAIGON**—The US Air Force is using unmanned supersonic planes to drop propaganda over North Vietnam and is considering employing the pilotless craft for bombing missions, US sources said yesterday.

The drones have been used in simulated bombing runs on test sites in the United States, but never as bombers in actual warfare.

The automatic planes, radio-controlled from a specially outfitted C130 "mother ship," were originally designed to carry cameras on reconnaissance missions over North Vietnam and China, the sources said. They have been used successfully in this role since the early 1960s.

The "pilots" of the drones sit in front of television and radar equipment in the "mother ship" and guide the planes to their targets.

This plane can guide the drones from 300 miles away and does not have to fly over hostile territory.

The drones being used in the leaflet drops are manufactured by Teledyne Ryan Aeronautical, an aircraft specialty company based in San Diego.

They are capable of speeds of up to 900 miles an hour, can fly as high as 60,000 feet and for distances of more than 700 miles to and from a target.

The drones and their mother ships are based at the US installation in Nakhon Phanom, Thailand, near the Laotian border, the sources said.

North Vietnamese and Chinese gunners have downed scores of the drones since they were first used as picture-taking planes in 1962.

The US command has never acknowledged use of the drones, and therefore has not reported the loss of any to Communist ground fire.

[From the New York Times, May 14, 1972]

**150 RAIDS MADE ON NORTH, SOME ON 'SPECIAL' TARGETS**

**SUPPLY AND COMMUNICATIONS FACILITIES ATTACKED—HEAVY FIGHTING CONTINUES AT ANLOC AND NORTHWEST OF SAIGON**

(By Sidney H. Schanberg)

SAIGON, South Vietnam, Sunday, May 14—American warplanes made 150 bombing raids on North Vietnam yesterday, United States military sources reported.

Most of the raids struck the south of the country, but the sources said "a few" were carried out on "special" targets, which reportedly did not include the immediate areas of either Hanoi or Haiphong Harbor.

The sources said the Air Force reported knocking out the entire petroleum-pumping network that had been supplying the North Vietnamese on their offensive in South Vietnam.
The United States command does not disclose the specific targets in the North; but the pumping stations, bridges, roads and rail lines. [United Press International, quoting military sources in Saigon, reported that United States planes armed with electronically guided bombs.]

**ANLOC FIGHTING HEAVY**

In South Vietnam, heavy ground fighting continued at Anloc, the besieged provincial capital 60 miles north of Saigon. And in a battle on the northwest approaches to Saigon, within 23 miles of the capital, South Vietnamese forces killed 127 of the enemy, according to a Saigon command spokesman.

This engagement, six miles northwest of Trang bang, began when North Vietnamese troops staged an artillery and ground attack on Government infantry. The Government troops called in artillery fire and air strikes. Government losses, the spokesman said, were four killed and four wounded.

This enemy operation is an extension of the attack on Anloc, where the remnants of eight South Vietnamese battalions have been cut off and under siege for over a month.

Intensified North Vietnamese assaults began on Thursday, with about 10,000 artillery shells falling on the rubber-plantation town, which is the capital of Binh long province.

**TOWN BATTERED**

The town is now nearly flattened, not only by enemy artillery but also by thousands of tons of bombs and rockets from American and South Vietnamese planes.

With the help of this air support, the Government troops—who hold only the southern half of the town—were able to resist the renewed infantry and tank attacks, but military sources said today that there were still enemy companies inside the South Vietnamese perimeter. Casualties on both sides were said to be high.

Although about 20 B-52 bombers pounded North Vietnamese positions around Anloc during the 24-hour period that ended at noon, support was hampered by cloudy and rainy weather.

The B-52 strikes at Anloc during the last three days have been some of the most concentrated air raids of the Vietnam war.

The road from Saigon north to Anloc, Route 1B, has been cut by the Communists from the beginning of the siege early last month. But military sources reported today that a stalled Government relief force—the 21st Division—had begun to make progress toward Anloc, reaching a point about six miles below the town by nightfall.

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**B-52 IS RELIED ON MORE THAN TROOPS TO BLUNT FOE'S OFFENSIVE IN VIETNAM**

(By Craig R. Whitney)

SAIGON, SOUTH VIETNAM, May 18.—Despite four years of Vietnamization, American and South Vietnamese military commanders here have relied less on the Government's ground troops to stem the current North Vietnamese offensive than on an instrument of massive bombing that only the Americans have—the B-52.

B-52's have been credited in recent weeks with helping to hold off determined enemy attacks not only on Anloc, where about 30 B-52 missions were flown on May 11 to repel a North Vietnamese push sixty miles north of Saigon, but in Kontum Province in the Highlands and near Hue as well—on all three fronts.

The B-52 missions have included raids on two raids near Hai Phong harbor and near Thanho in North Vietnam, the deepest inside the North they have ever gone.

A B-52 strike just this last Tuesday near Anloc killed 300 North Vietnamese soldiers, destroyed a tank, two artillery pieces and two antiaircraft guns, the United States command reported today.

**B-52 IN UNPLANNED ROLE**

Well over half the enemy casualties reported since the offensive began at the end of March have been credited to American and South Vietnamese air power.

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[From the New York Times, May 19, 1972]