The Sikorsky H-19 in Vietnam—1957

by Kent A. Mitchell

(All photos by the author unless otherwise noted)

UNITED STATES INVOLVEMENT, direct or indirect, with the area now known as Vietnam is well documented as far back as 1940. However, due to a treaty signed at a Geneva Conference, our military found it necessary to conduct clandestine operations within the area beginning in early 1957. It is very unlikely that many (if any) references to these activities will be found in the history books. Here is the background as to how this situation came about and a firsthand account of a participant.

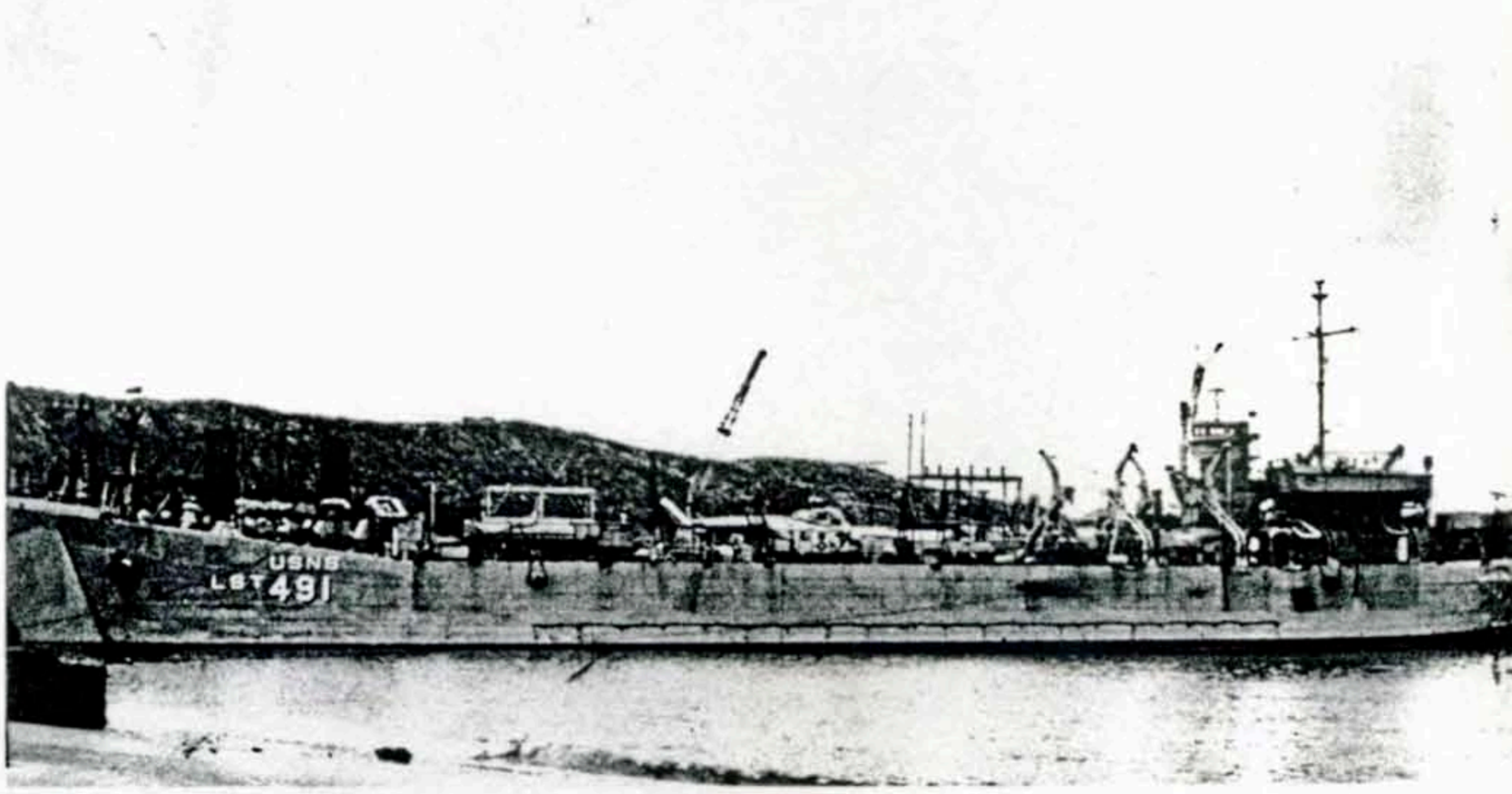
Prior to 1940, few Americans had ever heard of a small European colony in Southeast Asia known as French Indochina. Americans who were interested in the country consisted of mostly missionaries and only a few businessmen who were buying rubber from the French. The French colonialists, meanwhile, who were only interested in exploiting the country and its people, were too busy to notice that they were causing the disintegration of the existing social system and that there was an emerging Communist movement led by a young Ho Chi Minh. These occurrences were further unnoticed or not ackowledged upon the onset of World War II when the Japanese, having been at war with China since 1937, pressured the French into ceasing to allow the flow of war materials through Indochina to China, but instead allowed Japan the access and use of the country for *their* operations against China.

Capitulation to Japan's demands caused much alarm in the U.S. and created ill feelings toward France. That the Japanese soon had 50,000 troops in the country, had airfields in the south and a Naval base at Cam Ranh Bay, was seen as a threat to the Philippines and nearby colonies of the British and Dutch.

But, during WWII, even though the Japanese had by then completely taken over French Indochina, the area was considered only as a minor part of the overall China-Burma-India theater and not of much importance in the world's "big picture." Because the U.S. had never developed any sort of a political philosophy about Indochina—and did not need nor planned to use the territory for any part of the war effort—it was fairly well ignored for the duration.[1]

After V-J Day, the world powers decided that all colonial territories should be returned to their prewar rulers. However, in French Indochina, native nationalists had other ideas. A group known as the Annamites, inspired in part by Japanese propaganda and their own desire for self-rule, rose in armed revolt against the return of French colonial administration. At the time (1945), the country was under the cognizance of the Allied Occupation Army commanded by British Major General D.D. Gracey. With only a small contingent of Gurkhas (soldiers from Nepal in the British Army) and French troops at his disposal, the commander took a most bizarre action—he rearmed a large force of Japanese troops to help fight the Annamites! During all of the excitement an American officer, Lt. Col. A. Peter Dewey, was shot by Annamites who thought he was French.[2]

Skirmishes continued as the French attempted to reestablish their colonial rule. By 1947, some Americans began to notice that the French were not doing very well. A December 29, 1947 article in *Life* magazine by William C. Bullitt (former U.S. Ambassador to France and Russia) noted that 115,000 badly equipped French soldiers with low morals were dying at the rate of 600 per month while attempting to reconquer "their" territory. The foe, several million Annamites whose only goal was independence, were not especially politically motivated and were just attempting to kill every Frenchman they could. That their leadership happened to have been taken over by Communists was of no importance to them. They did not consider that a victory meant replacing the yoke of France with the yoke of Moscow.



Navy LST 491, one of three used to support the HIRAN operations along the coast of Vietnam in 1957. Note the Sikorsky H-19 on deck amidships. (U.S. Navy Photo)

Sikorsky H-19B piloted by U.S. Air Force Capt. Charles Givens comes aboard LST at Manila, P.I., for trip to Vietnam.

Supporting their troops in Indochina was costing the French more than four billion francs ($33,613,446) a month and desperately needed American aid, but they did not dare ask for it—because at the same time they were appealing for funds to keep the home country alive.[3] American policy was then centered on rebuilding Western Europe economically with Marshall Plan aid and in creating NATO. Besides having no economic interests in Indochina, the U.S. could not provide aid to France to reestablish its colony in Asia when at the same time the government was pressuring the British to give up India and for the Dutch to free Indonesia.[4]

Then, in 1950, a French force of 3,500 regular Army, Moroccans and Legionnaires was ambushed by 20,000 of Ho Chi Minh's followers. Only a few hundred French escaped. The shocking defeat caused the French to ask for and receive a promise of equipment from the U.S.[5] However, the U.S. was by then preoccupied with engaging Communists in Korea and the assistance was barely more than a token gesture. President Truman did establish a Military Assistance Advisory Group (MAAG) in Indochina in July of 1950.

By 1951, France had committed half of all its military to the Indochina campaign—using a motley collection of WWII surplus equipment purchased from the U.S. such as Sherman tanks, Grumman *Wildcat* fighters that had been used on Navy aircraft carriers, and

Captain Givens checks manifold pressure prior to lift-off from LST. On some hot days, the density altitude was such that a single 55-gallon drum of gasoline (330 pounds) was the maximum load the H-19B could carry to avoid exceeding the red-line limit.

At Site 39 near Quí Nhon, the terrain was such that the H-19 could not land squarely on all four landing gear wheels, but instead remained in a hover with two wheels on the ground while crew unloaded supplies.

The brush was so dense at Site 41 near Phan Rang, the 'copter could not land until men let themselves down by rope to clear an area with chainsaws. Last one down, the author's camera looks back up at the hovering H-19.

A Montagnard native looks on while HIRAN equipment is unloaded at Site 40 near Nha Trang.

old Douglas B-26 attack bombers. By that time Ho Chi Minh had announced that he intended to control all of French Indochina, which consisted of three semi-independent states—Vietnam, Laos and Cambodia—and that Communism would then have a springboard west to Thailand, south to Singapore and maybe even east to the Philippines.[6] It was then (after the Korean War truce) that the U.S. under then President Eisenhower began a serious effort to prop up the French.

The plan was for the U.S. to pay a large share of the cost of training and material for the Armies of the three states comprising Indochina to assist the French "... in the fight of the free world against Communism. ..."[7] Eisenhower announced on May 8, 1953, that the U.S. had given France $60 million in support and more aid was announced in September. By 1954 it was reported that three fourths of the war's costs were met by the U.S.[8] In return for the American assistance, a promise was extracted from the French to abandon their ideas of colonialism and grant real independence to the three states involved. A conference with all parties concerned was scheduled in Geneva, Switzerland, to achieve that goal. (The U.S. was only an interested bystander.)

Meanwhile, in spite of the massive American aid, the French had only managed to fight their way to a stalemate in the effort to expel the Communists. Of particular concern to the American advisory group was the French decision to conduct operations within a valley known as Dien Bien Phu in an effort to lure the Communists into a decisive confrontation. What the French did not take into account was that the Reds were extremely

anxious for a victory for use as a bargaining position at the Geneva conference. An estimated 40,000 Communist troops soon surrounded the 15,000 Frenchmen. Despite heavy losses (6,000 casualties), the Communists pounded the French defensive perimeter from an area of six by four miles to less than a mile in diameter.[9]

Fresh French paratrooper reinforcements were flown all the way from Paris aboard U.S. C-124 *Globemaster*s to Indochina and dropped behind the lines at Dien Bien Phu—but the efforts were too little and too late.[10] During the first week of May 1954, the strategic outpost fell.[11] Not only did the defeat at Dien Bien Phu destroy the elite of the French forces, it also destroyed the will of the French to carry on.

Back in Geneva, a truce was signed. The Geneva Agreements divided Vietnam in half pending elections (never held) and recognized Laos and Cambodia as independent. The diplomats had signed a pitiful paper that forfeited almost everything the French soldiers had fought for—at a cost of 172,000 casualties including 48,000 reported missing. The truce severed Vietnam, like Korea, at the waist—and the Communist world could claim 12 million new subjects.[12]

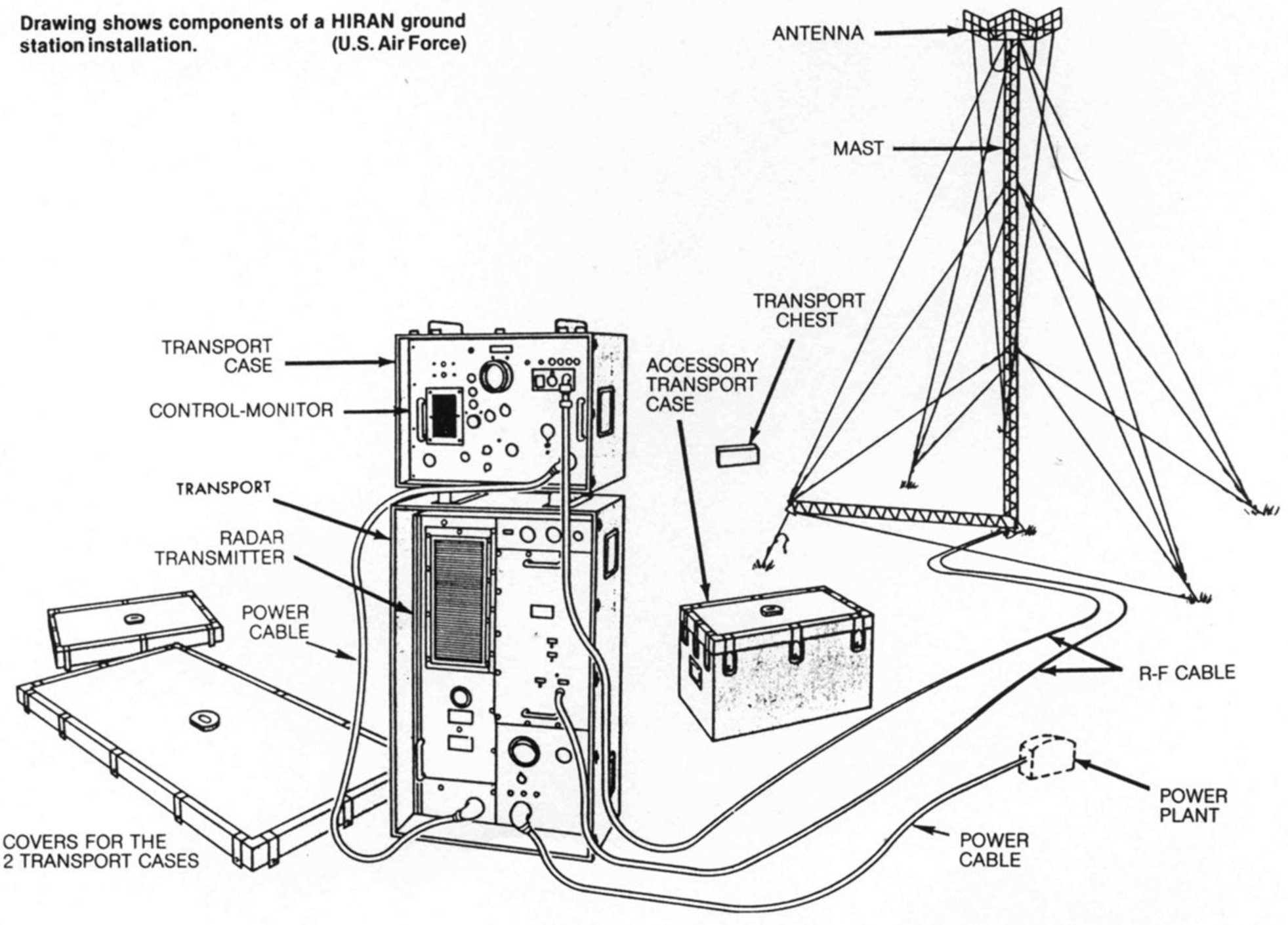
The U.S., which did not sign the truce, did agree to respect it. However, it was soon apparent that the U.S. was providing aid to the anti-Communist Republic of Vietnam in the south led by Premier Ngo Dinh Diem. It also was soon apparent that Diem was preoccupied with trying to reign over a chaos of racketeers, mobsters, and religious sects—all with their own private armies—and all fighting each other for territorial control.[13]

With the departure of the French, the instability of the sitting Diem government, and the increasing American involvement came the realization that the U.S. military had very little "detailed" knowledge of the territory. (Spell "detailed" as *maps*.)

Meanwhile, coincidentally, on the other side of the globe there was a U.S. military unit busily engaged in mapping (and correcting) the world's geography. During the early 1950s the Air Force had developed techniques enabling CPN-2A SHORAN (**SH**ort **RA**nge **N**avigation) equipment to be "fine-tuned" and utilized to gather raw data which could be used to make very accurate maps. Used in this manner, the electronic equipment was renamed HIRAN for **HI**gh accuracy Sho**RAN**. By combining the use of this equipment with known triangulation techniques, it became practical to conduct geodetic surveys over distances previously not possible with optical transits or theodolites. This was important at a time when the USAF was in the process of fielding long-range strategic bombers and intercontinental missiles. However, the truth was, scientists—much less the military, did not know exactly what the distance was from New York to Moscow or Mandalay or anyplace else. Therefore, the USAF gave its Air Photographic and Charting Services (APCS) a gigantic task—map the world!

Operating out of Palm Beach Air Force Base, Florida, the APCS's 1370th Photo Mapping Group developed and verified its HIRAN procedures and techniques by

Drawing shows components of a HIRAN ground station installation. (U.S. Air Force)



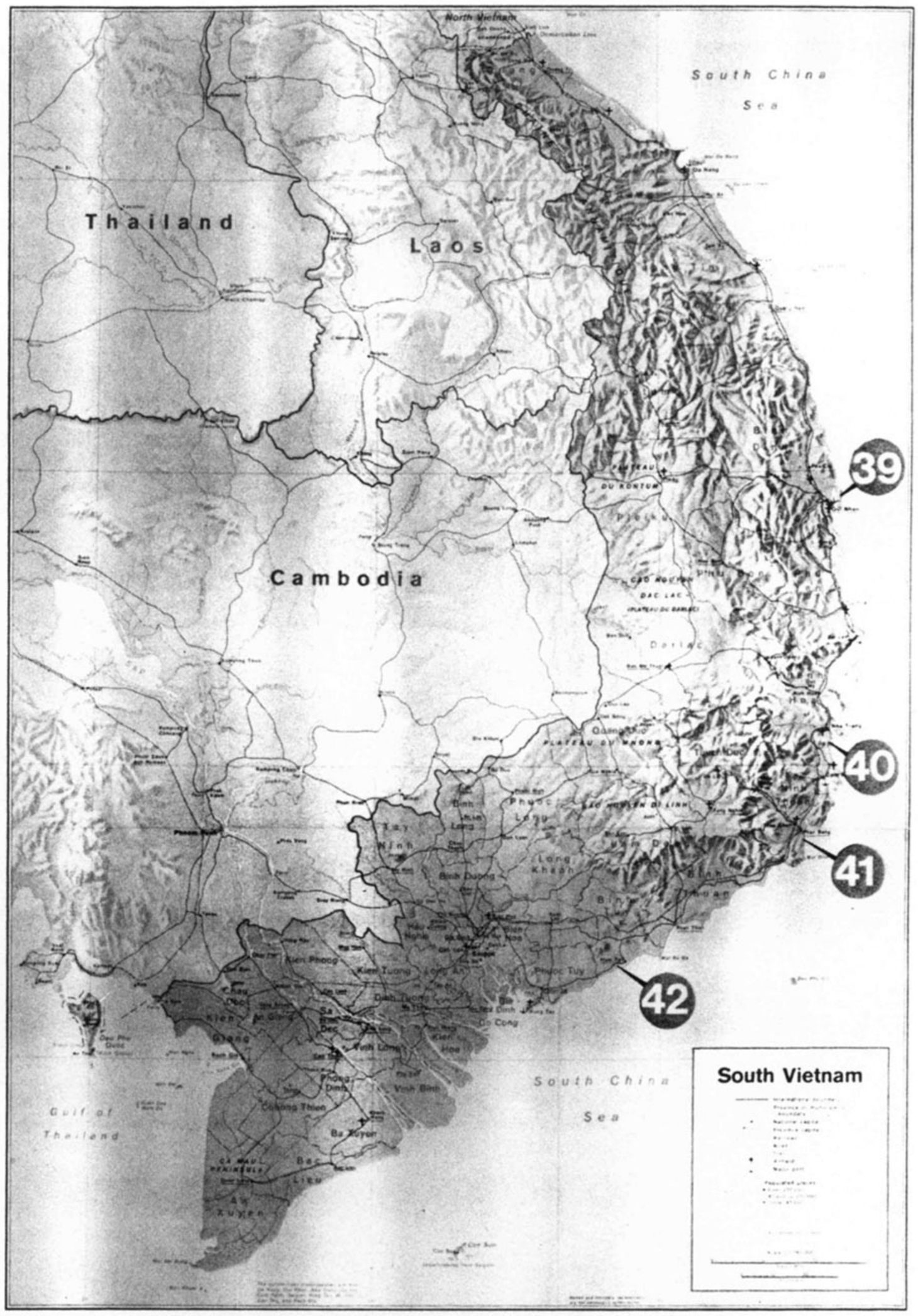
Givens slings a load of lumber into Site 42 for use as the tent floor.

Map shows locations of the four mountaintop HIRAN sites in Vietnam during 1957. (Central Intelligence Agency)

Kent Mitchell wears denim pants, jacket and Stetson hat which soon proved to be too hot for Vietnam. (Photo by Author, using self-timer)

performing surveys in the nearby Caribbean. The unit soon amazed mapmakers by discovering that Grand Bahama Island, a scant 100 miles off Florida's east coast, was shown on existing charts with a position error of eight miles! Flush with success, in 1955 the electronic survey teams began the arduous task of geodetically tying the coasts of the vast Arctic wastelands of Greenland together and to the land masses of North America and Europe.

Back in South Vietnam, even though the U.S. was then providing aid amounting to $400 million a year, our own State Department was briefing new personnel to be stationed in Saigon that Premier Diem had only a 30 percent chance to



survive.[14] Anticipating Diem's fall from power and the possible loss of our access to the territory, it was decided that the 1370th would redirect their data gathering efforts to the Far East.

In 1956, USAF Capt. Herman H. Carnell was sent to perform a visual reconnaissance of the preferred HIRAN site locations and determine the logistics required to install and support the four-man teams which would operate the equipment. Because the French had performed some basic surveys in Vietnam during the 1920s using conventional transit techniques, the HIRAN antennas would be placed over their benchmarks —which were all on mountaintops in the boondocks. To expedite the locating of these markers, Capt. Carnell utilized a contracted French-built civilian Aerospatale *Alouette II* helicopter. Near the end of the mission the 'copter made an emergency hard landing and Carnell sustained serious back injuries. However, the captain had gathered enough information so that he was able to complete his report and recommendations from his hospital bed.

Because of the sensitive political turmoil in the area, and because the U.S. did not want to give the impression of having any military involvement, the

Camp for Site 42, near Ham Tan. HIRAN equipment was located a two-mile climb up side of mountain. Old French land mines were lying all around in this clearing.
Air Force 34422 lands to resupply the base camp at Site 42.

The HIRAN crew at Site 42 (clockwise from top left: William H. Lines, Kent A. Mitchell, Henri G. Scotto Di Perta, William R. Harris).
(Photo by Author, using self-timer)

H-19B from LST 117 resupplies Site 42 with a 55-gallon drum of gasoline via sling. Crew had painted white stripes on tail boom and while at it gave the chopper white sidewall tires.

HIRAN Site 42 is almost concealed by the rugged terrain.

activities of the 1370th would be given the classification of SECRET. Therefore, it was also decided all personnel assigned to the geodetic survey teams would wear civilian clothing. (Captain Carnell in his report had recommended that appropriate apparel in the jungle would be denim pants and jackets and Stetson hats.) Accordingly, each team member was given a cash clothing allowance of $150 to "local purchase" these items.[15] (Other than the Stetson hats, most airmen already had civilian clothes—consequently a few denim outfits were bought, but a lot of somewhat expensive sport coats were also bought and mailed home for post-service use.)

In addition to the civilian clothes, all personnel were issued a civilian Special Passport by the Department of State on May 28, 1956.

Continuing with the guise, "civilian" weapons were to be carried by those folks in the jungles of Vietnam ". . . for protection against tigers and other wildlife." Each four-man team was issued a government-owned .375-caliber Magnum rifle and a 12-gauge, sawed-off barrel shotgun (with double-ought load shells). Each man was also allowed to carry his own personal sidearm. The author had a Colt .38-caliber Police Special revolver and his NCO packed a .9mm Luger pistol. Captain Carnell, a large man, carried a heavy Smith & Wesson .357 Magnum revolver.

With personnel trained and outfitted, the electronic equipment tested and calibrated, deployment orders were issued to ". . . proceed on or about 20 Jan '57 from Palm Beach AFB, Florida, to Clark AFB, P.I. [Philippine Islands], and such other places prescribed by APCS OPLAN 514-56. . . ."[16] The "such other places" included Vietnam.

Transportation for personnel to the

Philippines was provided by Military Air Transport Service (MATS) Douglas C-54 *Skymaster* and Lockheed C-121 *Constellation* aircraft while equipment and supplies were aboard a Douglas C-124 *Globemaster*. Other equipment was lashed down in the bomb bays of the 1370th's Boeing RB-50 aircraft which would be used as the airborne component of the HIRAN operations.

With the Philippines as the base of operations for the unit's activities while in the Far East, administrative and logistical support was provided by the 6200th Air Base Wing at Clark AFB.

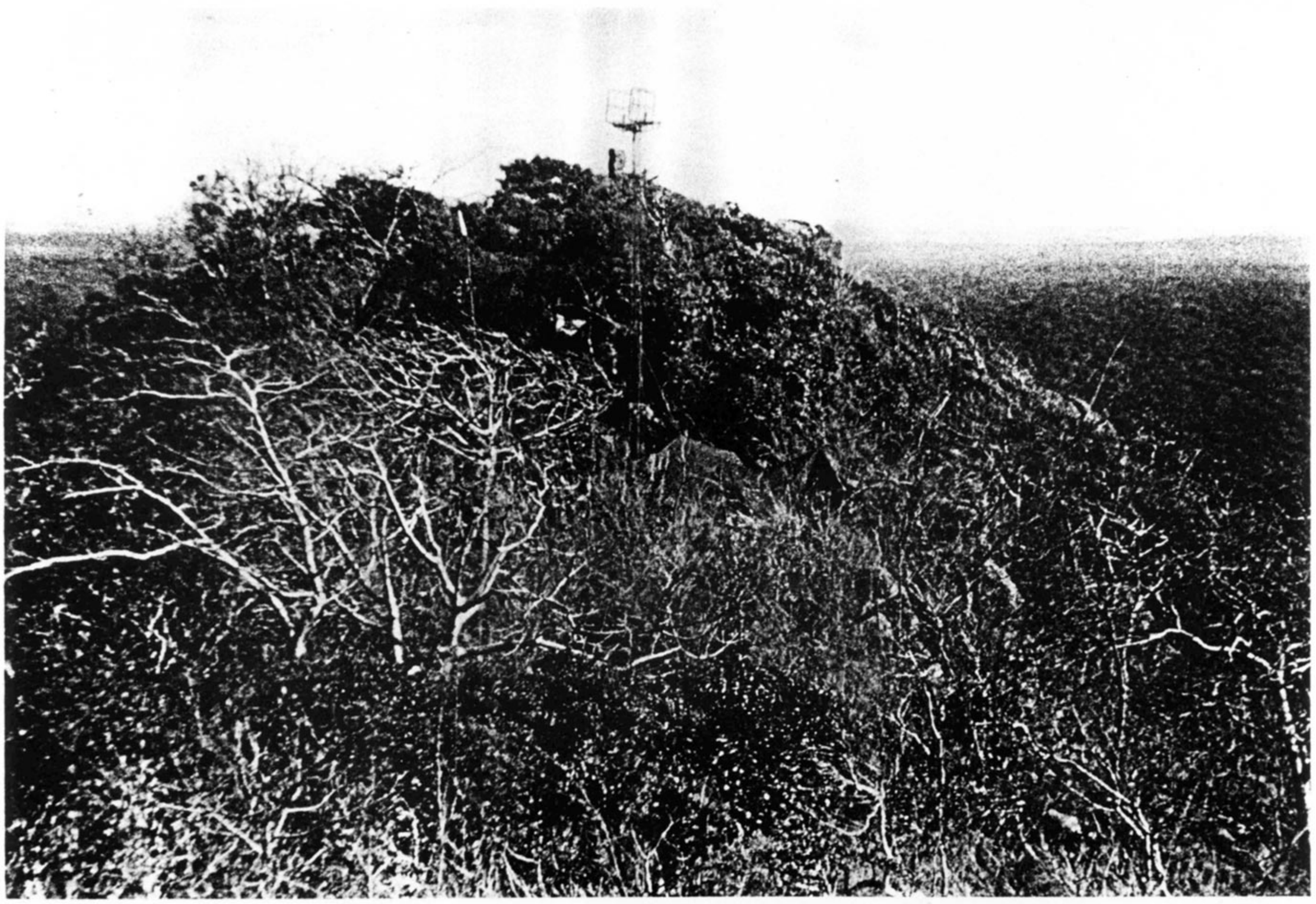
From Clark to the coast of Vietnam, U.S. Navy LST ships manned by Japanese civilian contracted crews were utilized. Anchored in the South China Sea, LST numbers 47, 117 and 491 provided platforms for launching Sikorsky H-19B helicopters to transport men and equipment to the mountaintop HIRAN sites.

All HIRAN sites in the triangulation network were assigned numbers. There were four sites in Vietnam, Site 39 at Qui Nhon, 40 at Nha Trang, 41 at Phan Rang, and 42 about 100 kilometers east of Saigon, just south of the coastal village of Ham Tan.[17]

Team members went ashore at Qui Nhon the morning of February 23, 1957, to set up the first station. Site 40 was erected on the 25th, followed by 41 on March 1st and 42 on the 4th. Concurrently, other stations were being set up on small islands in the South China Sea known as North Danger Reef and Spratly. Those two sites would serve to geodetically connect Vietnam to sites in the Philippines in the triangulation network.

Later, elements of the network would extend to Formosa with sites near Keelung and Taichung—and quick clandestine boat trips to the coast of Red China under cover of darkness to transmit HIRAN signals from sites near Hinghwa and Huang-Shih—but that is another story.

When the ground stations were installed and declared operational, and the stormy tropical weather permitted, the 1370th's RB-50s were scheduled and launched from the runways of Clark AFB. Flying at typical altitudes of about 30,000 feet in a racetrack pattern at the



midpoint between pairs of HIRAN ground stations (forming each leg of the triangulation network), the RB-50 crews flew exhausting 16 hour-long missions.

On the ground, the noise of the putt-putt powered electric generators for the HIRAN and communications equipment soon attracted the attention of a few of the Vietnamese locals who, curious, stopped by the sites. No confrontations occurred, however. Apparently it was assumed the "foreigners" were only engaged in some sort of wildlife hunting expedition. Indeed, during the sometimes many days between missions, the off-duty crews shot boar, sabre-tooth deer, rabbits, and wild chickens to supplement their government-supplied K rations.

Although there were no conflicts with the local villagers, a few casualties did occur—albeit, mostly self-inflicted. One young airman, while practicing his "quick draw" technique with a loaded semi-automatic pistol, shot a hole through his foot. Another fellow, with the aid of his tentmate, attempted to

Helicopter was used to string a long-wire, high-frequency radio antenna from dead tree.

Landing area at Site 36, North Danger Reef, in the middle of the South China Sea.

Captain Givens attempts to blow stuck LCVP from LST 491 off beach at Site 36.

separate the stock from the barrel and receiver of a 12-gauge shotgun that unknown to him had a shell in the chamber. The resulting blast removed a large portion of the muscle on the back of his thigh. Then, one of the NCOs picked up his shirt from the ground and put it on without first shaking it out. The scorpion lurking inside nailed him on a finger. Within minutes his hand became swollen and he became very ill. Fortunately, the organization's LSTs with their onboard H-19 'choppers were nearby in the South China Sea—ready to evacuate personnel—for any reason.

A medic on one of the LSTs treated the insect bite victim while the gunshot wounded were flown to the hospital at Clark AFB via a Grumman SA-16 *Alba-*

tross of the Air Rescue Service.

One helicopter was lost in the course of the operation when the tail rotor of the H-19 piloted by Capt. Charlie Givens became entangled in some tree branches. The captain immediately landed but the machine hit hard, rolled on its side, and flailed itself to pieces. Givens walked away from the crash shaken, but not injured.

Back at APCS headquarters, data analysts had performed a cursory examination of the raw data obtained from the HIRAN missions. It was determined that sufficient valid information had been obtained that would enable the mapmakers to do their thing—convert the leg length measurements into a geodetic triangulation network. Later, other cartographers could convert this network to the more familiar topographical map format.

Consequently, after several months of operation, the mountaintop Vietnam HIRAN sites could be dismantled. Men and equipment were removed from the sites in the same order as installed: 39, 40, 41 and 42. The last Air Force personnel departed Vietnam Site 42 at 1700 hours, 16 May 1957.

While this heretofore untold story is not about being under fire or "how many Cong we eliminated," it is a story of a *mission accomplished* and is a part of our military aviation history. The data obtained enabled accurate printed maps to be created and provided for use by the combat personnel who eventually followed the HIRAN crews into the country. □

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