OPERATION MILLPOND
U.S. Marines in Thailand, 1961

Colonel George R. Hofmann Jr.
U.S. Marine Corps (Retired)

Occasional Paper

HISTORY DIVISION
UNITED STATES MARINE CORPS
QUANTICO, VIRGINIA

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Cover: An Air America helicopter (with "Marines" painted over), part of a 20-aircraft fleet that arrived in Udorn, Thailand, in 1961. At this base, U.S. Marines provided ground support for civilian pilots and crews that flew missions in support of Royal Laotian troops who were fighting against the Communist Pathet Lao. Photograph provided by the author.
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Occasional Papers

The History Division has undertaken the publication for limited distribution of various studies, theses, compilations, bibliographies, monographs, and memoirs, as well as proceedings at selected workshops, seminars, symposia, and similar colloquia, which it considers to be of significant value for audiences interested in Marine Corps history. These "Occasional Papers," which are chosen for their intrinsic worth, must reflect structured research, present a contribution to historical knowledge not readily available in published sources, and reflect original content on the part of the author, compiler, or editor. It is the intent of the Division that these occasional papers be distributed to selected institutions, such as service schools, official Department of Defense historical agencies, and directly concerned Marine Corps organizations, so the information contained therein will be available for study and exploitation.
George R. Hofmann Jr. experienced Operation Millpond firsthand as a young enlisted Marine. He is now a colonel on the retired list and an instructor at George Washington University, and we are indebted to him for this account of a little-known aspect of U.S. Marine Corps history in Southeast Asia.

This operation highlights the role that the small country of Laos played in the foreign policy calculations of the newly elected U.S. president, John F. Kennedy. Gravely concerned that the Laotian government was in danger of being overwhelmed by a growing Communist insurgency known as the Pathet Lao, President Kennedy took the bold step of deploying Marine Air Base Squadron-16 (MABS-16) to nearby Thailand for the purpose of supporting a collection of helicopters piloted by an organization called Air America. Hollywood later made a movie about Air America, and it is now widely known that it was linked to the Central Intelligence Agency. The Marines of MABS-16 received no such fanfare. Working behind the scenes in austere conditions, MABS-16 gave new meaning to the phrase “in any clime and place.” While Operation Millpond may seem like a small thing in comparison with much larger operations that were soon to be conducted by Marines in the Republic of South Vietnam, it nonetheless represents a clear beginning to a growing U.S. military commitment to the region as a whole, one that did not end until the last Marine left the roof of the American embassy in Saigon in 1975.

We are indebted to Colonel Hofmann for providing us with this account and for sharing his personal papers and photo collection. While it has been nearly 50 years since Operation Millpond took place, it is still relevant today as we see Marines deployed across the globe in hundreds of far-flung locations. While many of these places are usually hidden from public view at the time of the operations, the important and various roles performed by our dedicated Marines will never be forgotten.

Dr. Charles P. Neimeyer
Director of Marine Corps History
nearly 1961, Communist Pathet Lao military forces were coming dangerously close to taking control of the Southeast Asian country of Laos. A Pathet Lao victory over the Royal Laotian government not only would have lost a pro-Western nation to the Communist Bloc but would have put its neighbors—particularly pro-Western Thailand—at risk. To forestall this possibility, newly elected President John F. Kennedy and his administration decided to measurably increase U.S. support to the Royal Laotian government.

This increased support came in part in the form of a 20-helicopter fleet, flown by civilian pilots and crews employed by Air America. This helicopter force covertly flew Royal Laotian troops, weapons, supplies, and other war materiel in support of the Royal Laotian government's anti-Communist military operations. A major operational deficiency—Air America lacked any aircraft maintenance and flight-line operational and maintenance capability—was resolved by assigning a military organization with the required skills to play a supporting role. Marine Air Base Squadron-16 (MABS-16), located at Marine Corps Air Facility (MCAF) Futema, Okinawa, was assigned the mission. Operations were conducted from a bare-bones airfield located outside of Udorn, a town in northeast Thailand approximately 40 miles south of the Laotian capital of Vientiane.

At that time, I was a private first class, telephone/teletype repairman (MOS 2639) assigned temporary additional duty from the Communications Company, 3d Marine Division on Okinawa, to the MABS-16 communications detachment. I deployed to Thailand on 22 March 1961 and returned to Okinawa on 18 October 1961.* In addition to personal recollections and original letters written by me to my family, the sources for this occasional paper are the Operation Millpond after action report and various newspaper and news magazine articles. I provided all of the photographs that appear in this occasional paper.¹

I would like to thank the Marine Corps History Division for its assistance on this paper and recognize the Marine Corps Heritage Foundation for the research grant it provided to support this project.

* See my original orders in the appendix.
# Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreword</td>
<td>iii</td>
</tr>
<tr>
<td>Preface</td>
<td>v</td>
</tr>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Laos in the Years Following World War II</td>
<td>1</td>
</tr>
<tr>
<td>The Situation in Laos Deteriorates, 1960-61</td>
<td>4</td>
</tr>
<tr>
<td>President Kennedy Commits U.S. Forces</td>
<td>5</td>
</tr>
<tr>
<td>The Order to Deploy Marine Corps Forces is Issued</td>
<td>7</td>
</tr>
<tr>
<td>MABS-16 is Task Organized for its Mission</td>
<td>7</td>
</tr>
<tr>
<td>The Execute Order</td>
<td>8</td>
</tr>
<tr>
<td>The MABS-16 Mission</td>
<td>8</td>
</tr>
<tr>
<td>The Early Days of Operation Millpond</td>
<td>9</td>
</tr>
<tr>
<td>Your Only Comment Will Be “No Comment”</td>
<td>11</td>
</tr>
<tr>
<td>Aircraft Maintenance and Line Maintenance Operations—The First Weeks</td>
<td>12</td>
</tr>
<tr>
<td>Camp Construction</td>
<td>13</td>
</tr>
<tr>
<td>Logistics</td>
<td>17</td>
</tr>
<tr>
<td>Medical Support</td>
<td>18</td>
</tr>
<tr>
<td>Communications</td>
<td>20</td>
</tr>
<tr>
<td>Morale, Welfare, and People-to-People Programs</td>
<td>23</td>
</tr>
<tr>
<td>Aircraft and Line Maintenance Operations</td>
<td>27</td>
</tr>
<tr>
<td>Epilogue</td>
<td>32</td>
</tr>
<tr>
<td>Endnotes</td>
<td>32</td>
</tr>
<tr>
<td>Appendix</td>
<td>34</td>
</tr>
</tbody>
</table>
Introduction

A little-known Marine Corps operation in Southeast Asia in 1961 began with the March deployment of approximately 300 Marines to Udorn, Thailand.* There, for a period of nearly seven months, the Marine force provided support to a small group of Air America pilots, air crews, and support personnel whose mission was to fly helicopters and fixed-wing transport aircraft in Laos in support of pro-Western Laotian government forces. These Laotian government forces were fighting the Pathet Lao, an indigenous but externally supported Communist guerrilla insurgent group that was attempting to take over the country. The insurgency had been growing since the end of the French Indochina war seven years previous.

Laos in the Years Following World War II

Between April and July 1954, diplomats met in Geneva, Switzerland, to negotiate a formal peace treaty in Korea and, following the surrender of the French garrison at Dien Bien Phu to the Viet Minh on 7 May 1954, to negotiate conditions that would bring the French colonial period in Indochina to an end. On 20 July 1954, French and Viet Minh representatives signed an agreement effectively ending the eight-year conflict in Indochina. The following day, Great Britain, the Soviet Union, the Peoples Republic of China, Cambodia, and Laos joined the Viet Minh and France in endorsing the cease-fire agreement.2

The Geneva agreements called for, among other things, an independent and democratically governed Laos. However, events on the ground between the end of World War II and mid-1954 made clear that such an outcome for this landlocked nation would be unlikely. By the unfortunate fact of its geography, Laos was destined to become a pawn in the Cold War. Strategically located in the middle of Southeast Asia, Laos is slightly larger than the state of Idaho and has a population of approximately 2 million people. Its neighbors to the north and east in 1954 were the People’s Republic of China and the Democratic Republic of Vietnam, both Communist counties. Its other neighbors included South Vietnam to the east, Cambodia to the south, Thailand to the south and west, and Burma to the west.

The contest for the allegiance of Laos and for control of its government began in the late 1940s. Following the Japanese defeat in World War II, the French reinserted themselves into Indochina in an attempt to reassert dominance over their former colonies. In Laos, they encountered resistance to their return from forces affiliated with a provisional “Free Lao” government. As the French reestablished control, much of the leadership of the Free Lao forces, including many members of the royal family, fled to Thailand. Most returned to Vientiane (the seat of the

* The commonly accepted name of the city is now Udon Thani. It is the capital of Udon Thani Province. The airfield became known as Udorn Royal Thai Air Force Base. It transitioned to a civilian airport in 1976 and is now Udon Thani (or Udonthani) International Airport.
administrative government) and Luang Prabang (the royal capital) in the southwestern part of the country and began to form a government following semiautonomous independence within the French Union in 1949.

One leader, Prince Souphanouvong, aligned himself with Ho Chi Minh, who was establishing the Communist-sponsored Democratic Republic of Vietnam (DRV). In September 1949, the DRV radio announced the formation of the Pathet Lao, a resistance government within Laos. In the months that followed, the resistance government elected Prince Souphanouvong as its prime minister and established a Laotian National United Front and a People's Liberation Army.

Up through 1952, Laos remained relatively free of active fighting, aside from sporadic guerrilla activity along the Laos-Vietnam border. The situation changed in April 1953 when Prince Souphanouvong and his Pathet Lao forces, supported by combat-hardened Viet Minh veterans, launched a full-scale invasion into Laos and soon established control over the northern provinces of Sam Neua and Phong Saly. Efforts by the Royal Laotian Government to dislodge the Pathet Lao forces ended in failure.

The April-July 1954 conference in Geneva, which was convened primarily to bring the French Indochina conflict to a close, produced a series of agreements that were designed to end all fighting in Indochina. Specifically for Laos, the agreements provided for a cease-fire pending elections and called for the integration of the two Pathet Lao-held provinces into the national government. To supervise the execution of the Geneva agreements that pertained to Laos, an international commission with representatives from Canada, India, and Poland was established, with headquarters in Vientiane. Laos gained full sovereignty at the end of 1954.

The Pathet Lao initially refused to participate in elections and rebuffed all attempts by the national government to reassert control over the provinces of Sam Neua and Phong Saly. In 1958, however, the Pathet Lao did participate in elections, and although the pro-government candidates won a resounding victory, the Pathet Lao was able to elect more than 10 of its supporters.

The Geneva agreements ultimately did little to foster democracy in Laos; in fact, they had the opposite effect. They conferred legality and respectability on the Communist leaders and their party. The Communist party in Laos—the Neo Lao Had Xat—gained status as a legitimate party and thus was well positioned to employ its trained and disciplined Pathet Lao cadres. Their tactics, until fighting escalated in the late summer of 1960, focused on infiltration, subversion, and preparation for the complete takeover of the Laotian government.

By early 1961, much of the northeast of Laos was under the effective control of the Pathet Lao (and North Vietnam), and these forces were seriously threatening the administrative and royal capitals, Vientiane and Luang Prabang, respectively. Supplies of heavy weapons and other war-fighting materiel were being provided in
large quantities by the Chinese and the Soviet Union. These supplies were being trucked into northeastern Laos from the port city of Vinh in North Vietnam along one of the only trafficable roads that connected the two countries. Other supplies were being flown from Hanoi to Xiengkhouang, Laos, the site of an airfield under Pathet Lao control in northeast Laos. The Royal Laotian Army was performing poorly against the more aggressive and motivated Pathet Lao forces threatening its capital.

The Situation in Laos Deteriorates, 1960–61

August 1960 saw the beginning of a chain of events that brought the United States into active involvement in an attempt to keep Laos from falling into the Communist camp. During that month, Captain Kong Le, a little-known paratroop battalion commander, seized control of the capital of Vientiane. He passed control of the government to Prince Souvanna Phouma, a member of the royal family who was favorably disposed to the Pathet Lao. In its first actions, Souvanna Phouma’s proclaimed “neutralist” government invited the Soviet Union to open an embassy in Laos and pledged to maintain friendly relations with North Vietnam and China. Over the next four months, Communist influence within the government increased steadily until, in late 1960, the Laotian army under a former defense minister, General Phoumi Nosavan, retook the city. After losing it for a short period, the army again retook Vientiane and in mid-December expelled the Communist forces. The fighting, however, was not over.

As the Pathet Lao and Captain Kong Le’s forces were being pushed back to the east, reports began to surface that they were receiving massive support from the North Vietnamese and the Soviet Union. With this support, which was reported to include weapons, related war materiel, and North Vietnamese troops, the resistance in areas held by the Communist forces stiffened. In early January 1961, China’s Radio Beijing reported that the Pathet Lao and Captain Kong Le’s forces had taken the strategic Plain of Jars, including the town of Xiengkhouang and its airfield. In February, the Pathet Lao forces took control of the town of Muong Kassy, severing the strategic road between Luang Prabang and Vientiane. In its efforts to counter these advances, pro-Western forces continued to suffer “serious reverses near Xiengkhouang,” as reported on 30 March.3 From the positions they had established, the Pathet Lao could threaten the administrative capital of Vientiane to the south and the royal capital of Luang Prabang to the north.

The United States had been providing aid to the government of Laos since the Geneva settlement in mid-1954, which totaled $300 million by the beginning of 1960.* This aid had gone to support the Laotian Army, the police, and other governmental services. While Military Assistance Advisory Groups had been established to oversee aid and advisory efforts in other countries, the relatively

* The $300 million in aid equates to around $2.25 billion in 2008 dollars.
small assistance program in Laos was being administered by a Program Evaluation Office. Personnel assigned to this office were mostly technicians whose principal focus was training the Laotian army personnel in the technical and maintenance aspects of the equipment being provided. As the Laotian military faltered and the Pathet Lao forces—with seemingly unlimited support from the Soviet Union, China, and North Vietnam—gained strength and threatened to overrun the entire country, the United States, its support clearly inadequate, was faced with the decision of whether to make a greater commitment in an effort to reverse the unfavorable flow of events.

**President Kennedy Commits U.S. Forces**

In March 1961, newly elected President John F. Kennedy was briefed on the deteriorating situation in Laos and U.S. force levels in the Pacific Theater by Admiral Harry D. Felt, the Commander in Chief, Pacific Forces. The report was not encouraging. The military situation in Laos was continuing to deteriorate, with the pro-Communist forces making gains on all fronts. A small cadre of American civilian pilots under contract to the Laotian government was flying resupply and troop transport missions employing American-made helicopters and aging C-47 transport aircraft. They had sustained several hits on their aircraft, and as the level of fighting had intensified their support was becoming increasingly inadequate. A U.S. embassy C-47 aircraft conducting an observation mission had been shot down by hostile fire with the loss of all seven crew members—the first U.S. casualties of the Laotian war. The sole survivor, a U.S. Army major, was reported captured by the Communist forces. During this same period, five members of the U.S. Program Evaluation Office barely escaped injury when their twin-engine Beechcraft was hit multiple times by Communist ground fire. The small military assistance mission in Vientiane was also proving inadequate to the job.

In view of the dire situation facing the pro-Western forces in Laos, President Kennedy decided to substantially increase U.S. support. A major part of his plan called for the employment of increased numbers of nonmilitary helicopters and fixed-wing transport aircraft to be flown by civilian American pilots. Until this expanded nonmilitary force could become self-sustaining, support for its operations would be provided by U.S. military personnel, specifically Marines, who possessed the requisite skills in airfield operations, flight-line and aircraft maintenance, base support operations, and related functions. These U.S. military forces would deploy from military bases in the Far East to an airfield in northeast Thailand, approximately 40 miles south of the Laotian administrative capital of Vientiane.
On 12 March 1961, Marine Air Base Squadron-16 (MABS-16), located at Marine Corps Air Facility (MCAF), Futema, Okinawa, received its first message alerting it for possible deployment. The message directed the squadron to be prepared on 48 hours notice to move, employing theater airlift, a reinforced air base squadron with supplies, equipment, and personnel, to Udorn, Thailand, and establish an expeditionary base for operations and field maintenance for 20 HUS-1 helicopters. The deployment was to be completed within six days of receipt of the order to execute. Initially, MABS-16 was directed to establish and maintain a 30-day level of spare parts for the 20 HUS-1 helicopters. Prior to deployment, that requirement was increased to a 120-day supply. The deployment was named Operation Millpond.

MABS-16's initial deployment plans called for a total of 455 Marine Corps and Navy personnel. However, a U.S. State Department-Royal Thai Government conference imposed a ceiling of 300 as the maximum number of Marines that would be allowed to enter Thailand in support of Operation Millpond. This limitation had a serious impact on MABS-16's aircraft maintenance and flight-line operations capabilities, but the ceiling was not adjusted. Further, with only two exceptions, MABS-16 was directed to be completely self-sustaining with expeditionary equipment. The first exception was petroleum, oil, and lubricants that would be supplied by rail from Bangkok. The second was subsistence support, which as of 10 days after the Marines arrived would be provided by the Navy Commissary Store in Bangkok. In addition to the support for its Marines, MABS-16 was directed to deploy with additional camp equipment to support 80 Air America personnel.

In addition to organic personnel and equipment, seven detachments also deployed in support of MABS-16. They were:

- **Detachment, Headquarters and Maintenance Squadron-16**, responsible for maintaining a Class C and D aircraft maintenance facility.
- **Detachment Marine Air Base Squadron-17**, responsible for setting up and maintaining a tactical airfield fuel dispensing system and an air freight facility and supporting the crew of a Marine R4D-8 aircraft.
- **Detachment, Communications Company, 3d Marine Division**.
- **Infantry Platoon, 3d Marine Regiment, 3d Marine Division**.
- **Engineer Platoon, 3d Pioneer Battalion, 7th Engineer Regiment**.

The Order to Deploy Marine Corps Forces is Issued

MABS-16 is Task Organized for its Mission
The execute order for Operation Millpond was received on 19 March 1961. It directed movement to begin on 22 March, with the airlift phase to be completed in four days. MABS-16 was directed to be prepared to receive helicopters at the Udorn airfield on 27 March and to begin supporting helicopter operations immediately thereafter. Nine aircraft (five C-130s and four C-124s) carrying the most urgently needed members of the deploying force were scheduled to depart Okinawa on the evening of 22 March and arrive at Udorn, with intermediate stops at Clark Air Force Base in the Philippines and Bangkok, on 23 March. Both organic 1st Marine Aircraft Wing and U.S. Air Force (315th Air Division) aircraft participated in this airlift. Due to mechanical problems, only seven of these aircraft made it to Udorn on 23 March.

MABS-16’s mission, in part, read: “When directed, MABS-16 (-) (Rein) deploy to Udorn . . . for purposes of establishing an expeditionary base for operation and flight maintenance of 20 HUS-1 helicopters.” In fact, its mission demanded much more from its 300-man force.
MABS-16 was to provide total aircraft maintenance and airfield services, plus training in both of the aforementioned areas, and other support, to Air America, Inc. Although Air America was publicly identified as a company under contract with the U.S. government—an April 1961 *New York Times* article described it as a “subsidiary of Civil Air Transport, a private company based in Taiwan”¹— it was in fact covertly operated by the Central Intelligence Agency. Under its “contract,” Air America provided pilots, air crew members, executives, administrative support, and other personnel. However, the company was initially unable to perform the maintenance on its aircraft to keep them flight worthy, and it could not satisfactorily execute airfield operations. It was expected that after a period of training by the MABS-16 aircraft maintenance and airfield services Marines, Air America personnel would assume full responsibility for the maintenance of their helicopters and airfield operations. At that point, MABS-16’s mission would be accomplished and it could terminate operations and return to its home base on Okinawa.

**The Early Days of Operation Millpond**

Air America pilots had already been flying missions in Laos. Operating under the control of the Program Evaluation Office, they had been flying four HUS-1s in Laos since December 1960. One had been lost to enemy fire, and all of the others

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*The monsoon season brings considerable amounts of rain to northeast Thailand. The airfield is at the top of the picture. The initial, temporary camp was located to the right of the airfield.*
had been hit by enemy fire. Under its new and expanded contract, Air America was to receive 20 HUS-1 helicopters from the U.S. government. It was to operate these aircraft in support of the Royal Laotian forces engaged in combat operations against Pathet Lao insurgents that were being supported by North Vietnamese ground troops and supplied by the Soviet Union and China.

Of the 16 additional aircraft made available (to bring Air America up to its 20 authorized aircraft), 13 flew into the Udorn airfield on 27 March. Although efforts had been made to "sanitize" the aircraft, when the sun struck the fuselage of the arriving HUS-1s, a large white star and the word "Marines" were clearly visible under the light coat of green paint that had been applied to each helicopter. With the arrival of the final three helicopters a few days later, and the repair of the three that had been provided the previous December, Air America had 19 operational aircraft. The loss of a second aircraft a short time later left Air America with 18 assigned as April approached.

As maintaining Air America's operational capability was MABS-16's main priority, among the first Marines to arrive were 2 officers and 30 enlisted Marines from Headquarters and Maintenance Squadron-16's aircraft maintenance detachment. They immediately set about establishing aircraft repair shops in an empty hanger. Camp construction crews also arrived early. Communications was a priority, and when the author arrived on 23 March, only two general purpose (GP) tents had been set up. Over the next few days, the remainder of the force flew in.
During the initial days of the operation, Lieutenant Colonel Richard W. Johnson, the MABS-16 commanding officer, personally conducted an early morning “all hands” meeting. Within limits, he briefed his Marines on the command’s activities and the importance of its mission. He emphasized at every meeting that while the unit’s mission was not classified, Marines were not to talk about it to anyone. He noted that the secretary of defense had issued a directive making it clear that the only comment that Marines were allowed to make was “no comment.”

The first Marines to arrive were greeted with bare ground. As soon as tentage arrived, the Marines put up their own billeting and work spaces.

This directive did not sit well with the many correspondents representing the major print and television news services who began arriving from Vientiane, Laos, on the evening of 23 March, shortly after they had been informed that U.S. servicemen had landed at Udorn, Thailand. One correspondent, who filed a 25 March 1961 report for the *Evening Star*, a Washington, D.C., newspaper, noted that “The Marines have landed in Thailand with their eyes open and their mouths firmly shut.”16 “The only comment I have to make is no comment,” Lieutenant Colonel Johnson told the visiting newsmen.17 Staff members from the U.S. embassy in Bangkok were on the ground to ensure that no unauthorized photographs were taken. Interviews with the Marines establishing the camp were forbidden.18
Although the Marines were portrayed by one source as “disembarking on their top-secret mission,” there was nothing secret about it. Many correspondents, including newsreel cameramen, were at the airfield to greet the Marines as they arrived. Over the next several days, the newsmen filed many stories in major U.S. newspapers and weekly news magazines. Many gave accurate accountings of what was taking place; some, however, were well wide of the mark. An article from The New York Herald Tribune, with a dateline of 6 April 1961, ran with the headline “U.S. Marines Fly Laotians into Battle.” A 7 April 1961 Time magazine article published a picture of several HUS-1 helicopters with the caption “U.S. Helicopters & Marines in Thailand.” The accompanying article noted inaccurately that “Five hundred U.S. Marines unpacked their gear in Northeast Thailand . . . They were equipped with 16 helicopters, ready to help fly men and supplies to the fighting front if they were ordered into action.”

As the airfield and adjacent areas were Thai property, the Marines had no authority to restrict any correspondent’s access. Accordingly, for the next few days, newsmen mingled among the silent Marines attempting to glean information about what was going on. By 27 March, however, most members of the media had become discouraged and returned to Laos. The story and pictures that they most coveted—the arrival of the helicopters—took place on 28 March. On that day there were no correspondents or photographers in the vicinity of the airfield.

The local Thais were also curious about what was taking place at the airfield. For several days during and after the Marines arrived, local citizens, often numbering in the hundreds, stood on the main road adjacent to the airfield and observed the Marines as they constructed their tent camp.

**Aircraft Maintenance and Line Maintenance Operations—The First Weeks**

The Aircraft Maintenance Division’s Marines faced a daunting dual mission. They were tasked with providing aircraft maintenance and line maintenance for 20 HUS-1 helicopters with an anticipated utilization factor of approximately 120 hours a month. While performing these functions—for a period expected to run for 90 to 120 days, but which in fact ran for more than six months—they were also tasked to train Air America maintenance crews that would gradually phase in and assume all aspects of aircraft maintenance and line functions. Further, the Marines of the maintenance department were tasked with maintaining all shop and test equipment, special support equipment, aircraft spares, tools, and general aircraft consumables in sufficient quantity to sustain the operation.
The forced contraction of MABS-16's authorized personnel strength from the desired 455 to a ceiling of 300 ensured that the aircraft maintenance department was staffed to only spartan levels. To accomplish all of their tasks, only two officers, to include one avionics officer, and 37 enlisted men were assigned from Headquarters and Maintenance Squadron-16 to perform the aircraft maintenance functions. Initially, 56 Marines were assigned to perform line maintenance functions. This number was reduced to 37 early in the operation. Wisely, in light of the requirement to train Air America personnel, care was taken to assign experienced and qualified staff noncommissioned officers.

Within two weeks, Air America had provided approximately 40 men to begin training with the aircraft and line maintenance crews. About 15 were assigned to shops or other hanger functions. Unfortunately, as the tempo of operations picked up and backup helicopter crew chiefs were needed for actual flight operations into Laos, some of these men became unavailable for maintenance training and operations. Essentially, Air America's main effort remained on the flight line in the servicing of aircraft.\(^{22}\)

**Camp Construction**

Establishment of the camp began immediately upon the Marines' arrival and proceeded in two phases. Phase I dealt with the initial, temporary camp. An area was selected and marked off and as tentage arrived, the tents were put up in predesignated areas. First priority was given to billeting. Once living areas had been established, the mess hall, sick bay, and office tents were put up. In approximately

In the initial camp, all tents – including the Squadron Aid Station pictured – were pitched on the ground.
three weeks, the temporary camp had been completed. It served MABS-16’s Marines for more than two months until a more permanent—and more livable—cantonment was constructed on the opposite side of the airfield.

Phase II involved construction of a second camp that, while still expeditionary in nature, was more suited to protect the Marines from the monsoon rains that would soon be upon them. Construction of this camp took about 11 weeks to complete. The work was done by the engineer platoon with 1 officer and 21 enlisted Marines, augmented by 21 additional carpenters from the 1st Marine Aircraft Wing. Plans were drawn up to build the camp above ground, as it was anticipated that the entire area would be under water when the monsoon season began in the early summer. An area of approximately eight acres, which was relatively flat and free of vegetation and also in close proximity to the airfield, was selected as the site for the camp.

The squadron mess hall was located in one of the existing structures that had been rehabilitated by the engineers. Notice that it was built up off of the ground to prevent flooding during the monsoon season.

Three buildings, all in extremely poor states of repair, existed in the area chosen for the camp. During Phase II of the construction, these buildings were renovated and put into service. The first was designated as the camp’s future mess hall. Renovation began with the removal of all internal partitions and the screening of all windows. Storage areas were constructed on both ends of the building by
extending the existing decks and enclosing them. The second building was rehabilitated and turned into office space. It housed the sick bay, post office, exchange, squadron office, communications switchboard, and the motor transport office. A dry stores warehouse was also located in this building. The third building was given to Air America for its office spaces.

Five large platforms, roughly four feet off the ground, were erected in the main camp area. The platforms sat on approximately 800 posts placed at eight-foot intervals and sunk into the ground to a depth of 30 inches. The two largest platforms were 258 feet in length and 40 feet wide. Each could accommodate 13 strong-backed general purpose tents. The strong-backed general purpose tents were constructed in a manner that allowed all of the sides to be rolled up when the weather permitted. This allowed fresh air and breezes to flow through the tents. To keep out bugs and other undesirable critters, splashboards 15 inches in height were placed around each strong-backed tent from the deck up and the remainder of the frame up to the roof of the tent was screened in.

The third and fourth platforms were 100 feet long by 40 feet wide. One of these accommodated five strong-backed general purpose tents. The camp's laundry
and bath unit were placed on the other. The final platform measured 48 feet by 40 feet and was built to accommodate two corrugated roofed buildings of 20 feet by 22 feet. Inside of each of these buildings, a strong-backed command post tent was erected. These two buildings were joined together and served as the squadron's command center.

During the monsoon rains, the ground below the elevated cantonment was frequently flooded. The rehabilitated original building on the left housed the squadron's administration offices. On the right are strong back billeting tents.

A 31-foot by 15-foot wash house was also constructed and could accommodate up to 40 Marines at a time. Running water was provided from an adjacent 15-foot by 15-foot tower built 10 feet off the ground and holding a 3,000-gallon water tank. From this tank, two-inch pipes carried the water into the wash house to individual faucets that terminated at each of the 40 washing stations. Individual racks were constructed into which each Marine could place his helmet that served as his sink. Behind the billeting area, several heads were constructed. All of the platforms and the heads were connected by five-foot-wide walkways, each of which had a removable section to allow emergency (fire or ambulance) vehicles to drive through the camp.

Approximately 250,000 board feet of lumber, all rough mahogany, was used in constructing the camp. In addition, 600 pieces of corrugated tin, 150 rolls of screen, and 60 kegs of nails were used. All of this was purchased locally at a cost of approximately $22,000. The permanent cantonment was ready and occupied before the summer rains began. Even without the rain, the slight elevation, wooden flooring, and screened-in billets were a welcome change from living on the ground with the tent flaps always down.
Logistics

Marine Air Base Squadron-16 deployed with 44 pieces of rolling stock, which included, among other things, six M-211s (two-and-one-half-ton trucks), five M-38A1s (quarter-ton trucks), 10 M-7s (water trailers), two MB-5s (aviation crash/rescue fire trucks), and one D-4 (crawler tractor with dozer blade). Given the extremes of both the dry and the rainy seasons, all rolling stock required special care. During the dry season, the roads were covered with a fine powdery dust to a depth of two to three inches, which required changing the oil in the air cleaners twice a week and lubricating all vehicles weekly. During the rainy season, particularly in August and September, all vehicles traveled or stood in water, often above their axles. To keep them operational, they were lubricated twice a week. Despite close attention to these problems, many drive shaft universals, wheel bearings, and brake cylinders and linings required replacement at the end of the monsoon season in October. The generators' radiators rusted and gummed up more frequently than the radiators of the vehicles and required frequent flushing to prevent overheating. 23

The food service throughout the deployment was exceptional. After only 10 days on "C" rations, a galley was established in a fly tent, and three general purpose tents were outfitted to serve as the dining hall. Packaged Operational "B" rations with a fresh food supplement were served initially. Soon thereafter, fresh food substitutions for the "B" rations became available through the Navy commissary in Bangkok. Dry stores were transported from Bangkok by rail, and fresh food arrived in Udorn on MABS-16's R4D-8. On 29 April, the engineers completed work on the abandoned building that had been designated as the squadron mess hall, and it opened for business. Complete with refrigeration, storage space, galley, mess deck, and a dry stores warehouse, this new mess hall, operated by a mess management chief, six cooks, one baker and, after early May, several indigenous mess men, served three excellent meals daily for the duration of the operation.

The acquisition of water and ice proved to be a unique, but not insurmountable, problem for the deployed force. Filtered, not potable, water was used in the camp's showers and laundry. Although not suitable for drinking, it was available in unlimited supply and was inexpensive to purchase. The utilities section purchased it from the town of Udorn.

To provide water suitable for drinking, a water point was established at the edge of a pond about three-quarters of a mile from the camp. Unlimited amounts of water were available. Water from the pond was processed into potable water and distributed to the mess hall and the many "water buffalos"—400-gallon water trailers—that were sited throughout the camp. Marine Air Base Squadron-16 did not lack for water at any time during its stay in Thailand.
The mess hall, which used a fairly large amount of ice for its daily operations, required special consideration. Locally produced ice could not be used because it was made from unpurified water. After several visits to the local ice house, the Marines were successful in acquiring three large ice freezing cans on a temporary basis. These cans were taken back to the camp, where they were scrubbed, chlorinated, marked with an identifying paint, and then returned to the ice house along with a water buffalo containing potable water. The ice freezing cans were filled and the water was frozen. The Marines reached an agreement with the ice house staff that the resultant blocks of ice would be sold only to the Marines. Each day, the Marines purchased at least one block of ice from the ice house. The empty can was then refilled with potable water and returned to the freezer. When the water buffalo ran low, it was replaced with a full buffalo towed in from the water point. The process became routine, the language barrier diminished, and the mess hall was never without ice to support its operations.

Just before dark on 23 March, MABS-16's tactical airfield fuel dispensing system arrived at Udorn on 1st Marine Aircraft Wing aircraft. Before noon the following day, a 20,000-gallon system was installed and civilian contractors were filling it with aviation gasoline from tank trucks. On 2 April, a second 20,000-gallon system was installed and filled with JP-4 aviation fuel. These systems were maintained and operated day and night, seven days a week, by one staff sergeant, two corporals, and three lance corporals. The service that they provided during Operation Millpond was nothing short of outstanding.

To provide fuel to locations away from the Udorn airfield—which allowed the Air America pilots to refuel their aircraft without having to return to Udorn—the Marines began filling 55-gallon drums with aviation gas and having them airlifted to remote sites. On some days, as many as 200 drums were filled and airlifted to the alternate refueling sites. Over time, the Marines accumulated 2,000 drums (55-gallon) to meet their requirement to support the remote fueling sites.

Medical Support

The first flight into the airfield at Udorn on 23 March carried two Navy corpsmen, a field ambulance, and emergency sick-call supplies and equipment. This initial contingent was followed later the same day by a medical officer and a third corpsman. By the third day of the deployment, the medical staff had its full complement of eight corpsmen and one medical officer and its medical block, which was capable of supporting 500 men in the field for 30 days. Initially, sick call was conducted out of the field ambulance; however, by 26 March, a general purpose tent had been erected for the medical staff and, joined by the dental department, they opened for business. Although slightly cramped and dusty, the tent proved adequate, and the medical officer and corpsmen made it their place of business for a month and a half.
By early May, the engineer detachment had rehabilitated the second of the three buildings located in the new cantonment area, and on 8 May, the medical officer and his corpsmen moved into their new space at the permanent camp site. It was roofed, screened in, and well lighted, and it provided sanitary conditions adequate to allow the doctor to perform minor surgery. The plywood deck was easy to clean and kept insects from entering the sick bay between the floorboards. Further improvements included painting, the installation of white cotton sheeting on the overhead (which reduced the heat and reflected light), and the installation of a porcelain sink with running water.

Field sanitation, a critically important issue in the tropical environment of northeastern Thailand, was closely monitored by the squadron's medical personnel. The mess hall was inspected daily. With schistosomiasis, a parasitic disease spread by a waterborne pathogen, a serious problem in northeastern Thailand, the medical personnel closely monitored the camp's water supply. Their vigilance kept water supply problems to zero for the entire period of the operation. The heads in the original camp were inspected and burned out every five to seven days, and in the permanent camp, the concrete cistern-chemical heads were treated with unslaked lime twice a week. Insect control, a joint responsibility of the camp police sergeant and the sick bay personnel, was managed by use of a Todd Insecticidal Fog Applicator that dispensed a DDT fog in the general camp area on a regular schedule.

Sick call was conducted twice daily. During July, a typical month with 253 military personnel on board, 429 out-patient visits were made to the dispensary. Among the medical problems treated were 43 cases of diarrhea and digestive tract infections; 64 diseases of the eye, ear, nose, and throat; 17 acute respiratory infections; 133 dermatological problems; 2 injuries; 30 surgical conditions; and 8 cases of venereal disease.

The medical staff encountered few serious problems during the operation. Some of the more serious medical problems diagnosed and treated during the deployment included eight cases of malaria, three minor fractures, two burn cases (one requiring emergency hospitalization), one snake bite (a bamboo snake—not serious) and two scorpion stings, eight cases of heat exhaustion (all in the early weeks of the operation), and 37 cases of venereal disease.

Marines contracting a venereal disease were treated, usually with procaine penicillin or chloromycetin. In addition, they were placed on 14 days medical restriction and were counseled by the commanding officer. The prostitute involved was identified, and local authorities ensured that she visited the local public health clinic (supported by UNICEF funds) for diagnosis and treatment.
The Communications Section was made up of personnel and equipment drawn from the Communications Company, 3d Marine Division, Marine Aircraft Group-16, and Headquarters & Headquarters Squadron-1, 1st Marine Aircraft Wing. Its mission was twofold: to provide internal communications within the MABS-16 cantonment, and to provide voice and teletype radio communications to MABS-16's higher echelons of command.

To satisfy the first requirement, MABS-16 deployed with 44 EE-8 battery-powered field telephones, one SB-86 switchboard, and one SB-22 switchboard. As with the field phones, both switchboards were "field equipment" and were battery operated. Internal communications were quickly established throughout the initial base camp, with additional lines being run as additional tents were erected and occupied. Concurrent with the construction of the more permanent cantonment, plans were developed to provide it with telephone service. As soon as the second of the three preexisting buildings was rehabilitated by the engineers, the SB-86 switchboard was installed alongside of the MABS-16 offices, the sick bay, motor transport, and material offices. Lines were quickly run to all offices and other work spaces, the flight line, and some of the billeting tents, and internal communications

The communications center was established in a permanent structure outside of the main camp. The wires in the foreground held up a pole that provided elevation to the radio's antenna.
were established. This system served MABS-16's internal communications needs until the squadron departed in late October. Prior to passing the telephone exchange to Air America in October, the Marines made several upgrades to the system. Improvements included replacing the military "slash wire" that connected each telephone to the main switchboard with WD-110 wire, running all lines overhead, converting to a central battery system, and substituting Air America's desk phones for the Marines' military EE-8s.

In satisfying the second element of its mission, the communications section provided the link between MABS-16 at Udorn and its supporting organizations on Okinawa and at the Marine Corps Air Station, Iwakuni, on the island of Kyushu, Japan. In support of MABS-16's external communications requirements, two major circuits were maintained throughout the deployment. The first, which began operations on 23 March, was between Udorn and Bangkok. This circuit employed the AN/TRC-75 transmitter-receiver (the state-of-the-art radio transmitter-receiver at the time), with supporting TT-4s and AN/GGC-3 teletype machines. The AN/GGC-3 teletype machine employed a paper tape that was perforated each time a key on the keyboard was depressed. Complete messages were drafted on these paper tapes. Then, employing a one-time encrypting tape that was duplicated on the receiving end of the circuit, the message was transmitted in encrypted form. The circuit was operational from 23 March and was
capable of transmitting voice, Morse code, and teletype signals. The second circuit linked MABS-16 at Udorn with the Naval Communications Facility in the Philippines (NavComPacPhil). On the Udorn end of this circuit, the Marines employed a Commander in Chief, Pacific Fleet (CinCPacFlt) Communications Contingency Package, provided to MABS-16 specifically to facilitate external communications. Capable of both voice and teletype communications, this circuit was established on 8 April and was fully operational by 15 April.

High temperatures, poor signals, and mediocre antennas plagued communications on the Udorn-Bangkok circuit, and teletype incompatibility frustrated communications on the Udorn-NavComPacPhil circuit in the early days of the deployment. Signals improved markedly on the Udorn-Bangkok circuit after much experimentation with long-wire antennas cut specifically to frequency length, which were employed at Udorn, and the installation of a 35-foot fiberglass antenna to the AN/TRC-75 on the Bangkok end of the circuit. The teletype incompatibility problem on the Udorn-NavComPacPhil circuit was quickly resolved. With minor exceptions, both circuits enjoyed “five by five” communications for the duration of the deployment.

An AN/TRC-75 transmitter-receiver was set up outside of the communications center. The poles in the background supported the long-wire antennas that attached to the radio.
Not much could be done about the weather. Early in the deployment, the communications center was moved outside of the main camp and into a small wooden garage with a cement floor. This provided a cleaner environment for the communications equipment and allowed fans to be installed that somewhat mitigated the heat, much to the delight of the communications center Marines and their equipment. Two general purpose tents were erected adjacent to the garage where a radio, teletype, switchboard, and telephone maintenance shop was established. As the communications circuits were maintained 24 hours a day, a small billeting area was also established in the tents for Marines to use between communications center watches.

During their periods of operation, which ran from 23 March to 26 October, both circuits serviced considerable amounts of traffic. On the Udorn end on the Udorn-Bangkok circuit, 984 encrypted radio-teletype messages were sent and 2,991 were received. On the Udorn side of the Udorn-NavComPacPhil net, 1,919 encrypted radio-teletype messages were sent and 1,290 were received.\footnote{26}

Morale, Welfare, and People-to-People Programs

The morale of the squadron's Marines was excellent throughout the deployment. It was sustained in part by the knowledge that the Marines were deployed on an actual operational mission. Superb mail service throughout the deployment also contributed to the high morale. The MABS-16 fleet post office address did not change, so mail was never interrupted. Mail was delivered at least...
twice a week on the normal courier flights from MCAF Futema, Okinawa. Frequently, other flights would stop by Futema and pick up mail waiting to be delivered. A post exchange was established on 27 March, less than a week after the Marines began arriving at Udorn. Initially stocked only with necessities, its merchandise expanded considerably when it moved into a larger space in the permanent camp in late April. As the deployment matured and a more normal routine evolved, the Marines constructed a volleyball court, horseshoe pits, and two softball fields, and an organized athletics program emerged.

In late May, after all of the squadron’s personnel had moved to the permanent camp, the Western Pacific Armed Forces Film Exchange began providing MABS-16 with five or six movies each week. Free popcorn was provided, and the movies, which were shown in the mess hall, soon became the main source of evening entertainment. Three additional strong backed tents erected on a platform constructed from leftover materials served as the special service area. One tent was used for beverage sales—both soft drinks and beer could be purchased—and as a lounge area; a second housed a ping pong table, a reading area, and a barber shop. The third was equipped with a rostrum for religious services.

After about 10 days, the command initiated a liberty program for the deployed Marines. Liberty was limited to 100 Marines at a time; more than that number, it was determined, would overwhelm the town. As a security measure, Marines of all grades were issued liberty cards, and whenever a Marine was late over liberty, the
PFC Bruce Powell and the author in the driver’s seats of sam loos, the three-wheeled bicycles that were the Marines’ main transportation between their camp and liberty in the town of Udorn.

Udorn police would turn out every officer on its force to find him. Travel to and from town, about three miles distant from the camp, was by a sam lo, a three-wheeled bicycle rickshaw peddled by a man in the front with up to two passengers seated in the back. The cost of a one-way trip was three to five baht. (The exchange rate during the Marines’ stay in northeast Thailand remained steady at 20 baht to one U.S. dollar.) The only real bar in town was owned by a Thai army lieutenant who spoke English and was also the chief of police. It received a considerable amount of the Marines’ business. Several restaurants were available where a liter of Thai beer could be purchased for seven baht, and a very large plate of beef or chicken fried rice—very spicy—could be had for the same price. The local Thai citizenry were welcoming and friendly, and the Marines reciprocated. There were no adverse incidents for the duration of the deployment.

One-to three-day rest and recreation trips to Bangkok began in May. Marines traveled “space available” on the assigned R4D-8 or a Marine Corps DC-3, the latter aircraft often being piloted by a chief warrant officer and a master sergeant. A small bus, operated by the Joint United States Military Assistance Group, brought the vacationing Marines from the Don Muang Airport to downtown Bangkok. The centrally located Metropole Hotel, where a double occupancy room with a good bed and air conditioning was available for five dollars, received most of the R&R
business. Meals and drinks were similarly inexpensive. A good steak or lobster dinner at any of the many excellent restaurants cost between $1.50 and $2.00. Drinks were about $1.00 apiece. Cab drivers doubled as tour guides and for a very reasonable price would take Marines on tours of the city that included stops at several of the many beautiful Thai temples. For Marines who had saved some of their money, any of the many jewelry stores would make rings and other items in 24 hours. Black star sapphires were a favorite and were within the financial reach of nearly every Marine who wanted one. In 1961 the cost of two days in Bangkok was not beyond the reach of even the most junior enlisted Marine, and many took advantage of the opportunity to see one of Southeast Asia’s most beautiful and modern cities.

A vibrant and successful people-to-people program received its start from the invitation of a local Udorn basketball team to the Marines to play an exhibition game on public courts in town. This initial game quickly developed into a nightly affair, with several Thai teams showing up to play and crowds of spectators frequently numbering as many as 2,000 people coming to watch. In late summer, the city sponsored a basketball tournament, with several Marine and local Thai teams participating. After several playoff rounds, the Marine Aircraft Tactical Unit-1 Marines
Klongs (canals) run throughout the city of Bangkok. They carry off the monsoon rains and provide a watercourse for farmers to bring their vegetables and fruits from the countryside to sell to the city dwellers in “floating markets,” located throughout the city. emerged victorious. They were awarded a large silver trophy, which was suitably engraved and as of this writing resides in the MAG-16 trophy case.

In addition to the sports activities, the Marines undertook several projects to assist the local mission church and Catholic school. Through contributions collected at the MABS-16 camp, the Marines purchased materials and a local American contractor laid a concrete floor in the church. Several Marines volunteered to instruct evening English classes, and several were invited to visit the Udorn Teachers College for Sunday afternoon meetings with the college’s English classes.

**Aircraft and Line Maintenance Operations**

The aircraft and flight line maintenance Marines quickly adjusted to the rigors of their assignments. While remaining cognizant of their longer-term mission of training Air America personnel in aircraft maintenance and flight-line operations, they also knew that their immediate goal was to keep the maximum number of Air America aircraft in the air. During April, the first full month of operations, they managed to keep an aircraft availability average of 18.16 for their 19 HUS-1 aircraft.
Flight operations totaled 1,934.5 flight hours, for an average of 106.5 hours of flying time per helicopter. In May, they averaged an aircraft availability of 18.6 HUS-1s, which flew for a total of 1,750 hours.

The high availability rates were not achieved without much hard work on the part of the maintenance and flight-line crews and included many major repairs and the replacement of major components to the aircraft. During these initial two months of operation, the maintenance crews conducted 24 periodic calendar inspections, 19 engine build-up replacements, 5 main transmission changes, 8 major rotor changes, and 76 other component changes. The maintenance crews also repaired structural damage caused by 73 bullet strikes to the aircraft. The avionics shop serviced 115 major end items of helicopter equipment. With operational requirements demanding the maximum availability of aircraft, work was extended into the evenings, particularly on the flight line, where the Marines made concerted efforts to correct all of each aircraft’s discrepancies prior to morning.

While June witnessed a significant decrease in battle damage, it was becoming increasingly more costly in maintenance hours and effort to keep Air America’s overworked aircraft in the air. The maintenance problems were exacerbated by the frequent shortage of critical spare parts. During June, 60
aircraft-days were lost while awaiting parts. There was a solution to this problem, but it was not without cost. The number of aircraft grounded as a result of the lack of spares could be appreciably reduced by switching parts between aircraft. However, this practice added significantly to the maintenance work load measured in the increased hours required to take parts off one aircraft and put them on another. Nonetheless, in June, the Marines exchanged between aircraft eight tail rotor assemblies, two main rotors, two engine packages, and numerous other items such as carburetors, inverters and instruments. While this practice kept more aircraft in the air, it represented a considerably increased workload that had to be carried by the understaffed maintenance department.

A review of the spares resupply process found that the Air America stock levels at Don Muang Airport just outside Bangkok, the source of the maintenance department’s spare parts, were inadequate to meet the requirements of 20 helicopters often flying excessively long hours. Further, Air America’s spare parts records cards contained a mix of Navy and Air Force numbers, which caused confusion when Air America entered the Navy supply system at Naval Supply Depot Yokosuka to order parts. To resolve this problem, the noncommissioned officer in charge of the Navy Supply Section that was located at Udorn with the aircraft maintenance department traveled to Don Muang Airport to establish a workable system. His visit resulted in an improved system that forwarded all spare parts requisitions to Naval Supply Depot Yokosuka in Navy language. This improvement, in turn, speeded up the resupply process and raised Air America’s stockage levels at Don Muang Airport. While the spares levels improved, the maintenance crews at Udorn continued to be plagued by shortages for the duration of their tours.

Aircraft losses further reduced operational readiness. On 16 June, a HUS-1 made a forced landing on a sandbar in the Mekong River. To bring the helicopter to a location where it could be repaired, it was pulled through water that reached the level of the cockpit. The aircraft was repaired, but it was 30 June before it was returned to Udorn and put back into service. On 18 June, another HUS-1 was seriously damaged while aborting a landing at an altitude of 4,300 feet. Unable to check his rate of descent, the pilot settled his helicopter on a steep slope near the landing site. The helicopter rolled two complete revolutions before coming to a stop. Although selected items were salvaged, the aircraft was beyond repair and was destroyed.

There was significantly less work in July for the maintenance department Marines. This development resulted from a month of no battle damage and a sharply reduced requirement to perform major component changes. Despite this reduced work load, the maintenance crews kept an average of 16.9 aircraft in the air for a total of 1,625 flying hours, or an average of 96 hours per aircraft. One aircraft was lost due to an engine malfunction when the pilot was forced to land in an inaccessible site and the aircraft could not be recovered. On 23 and 24 July, two C-124s brought two HUS-1s to Udorn as replacements for the aircraft that had been
lost. They were quickly assembled and given the requisite test flights. No
discrepancies were found, and the aircraft were immediately placed in operation.

From MABS-16's arrival at the Udorn airfield in late March, Air America
personnel had worked closely with the aircraft maintenance and flight-line Marines to
acquire the knowledge they needed to completely run operations when the Marines
departed. With the end of July near, the 120-day mark—the outside limit of the
Marines’s expected stay—was approaching. In a first positive step toward the MABS-16 phase-out, Air America on 23 July assumed responsibility for all flight-line
functions. This was a major milestone and a step in the right direction. Marines
retained refueling responsibilities and continued to operate the tactical airfield fuel
dispensing system, and a senior staff noncommissioned officer remained on the
flight line as an advisor and coordinator between flight-line and hangar maintenance.

August proved to be a busy month for the maintenance department. In
response to a Thai request, two Marine HUS-1s were deployed within Thailand to
relocate the relay stations of a Thai TRC-24 radio relay system. Tragedy struck on
15 August when one of the helicopters crashed and burned in dense jungle just
short of its intended landing site, located at an elevation of 3,000 feet. The crash
killed two passengers in the cabin, and three crew members were seriously injured
as a result of burns. The crew chief also sustained a compound fracture of his lower
left leg. On 28 August, the second helicopter experienced engine failure and was
forced down approximately 150 miles from the Marine base at Udorn. An engine
package, borrowed from Air America, was trucked to the site of the downed aircraft
and installed by MABS-16 Marines, who were assisted by members of the Royal
Thai Air Force. The helicopter returned to Udorn on 2 September.

Concurrently, the Marines and Air America maintenance crews remained
busy supporting operations in Laos. During the month, with an average of 15.3
helicopters available, Air America crews flew a total of 1,569 hours for an average of
102.5 hours per aircraft. A serious in-flight accident that resulted in major fuselage
damage on the port side of a HUS-1 required the replacement of eight square feet of
external “skin” and several supporting ribs in the area around the left pylon, and
an additional 14 square feet of skin and several supporting ribs to repair the outside
of the radio compartment. Lack of spare parts continued to plague the maintenance
crews. Thirty-six aircraft days were lost in the month because the parts to put the
helicopters back into service were not available.

On 8 August, an Air America helicopter was shot down behind enemy lines. The
pilot made an emergency landing with the power on, and the crew escaped. After three
days of evading enemy forces, all crew members were rescued with only minor injuries.
The four helicopters that were involved in the search and rescue effort required
significant metal repairs for damage resulting from enemy small-arms fire.
While the Marines continued to perform most of the maintenance functions, the plan to transfer responsibility for all maintenance to Air America remained on track. August saw the arrival of 27 new Air America employees, all of whom came with experience as general aircraft mechanics. They were assigned full time to classroom instruction during the day to familiarize them with the HUS-1 aircraft and then were assigned an evening shift on the flight line. Earlier in the month, a Sikorsky factory representative had arrived to provide technical assistance during the transition. He served primarily as a classroom instructor for the newly arrived employees. Late in the month, a tentative agreement was reached with the Air America station manager to effect the complete transfer of aircraft maintenance responsibilities in late September, well into the sixth month of the deployment.

Between 1 and 22 September, 15 helicopters on average were available for flight operations, and a total of 856.1 hours were flown. Battle damage increased somewhat during this period, with repairs required on seven aircraft. On 4 September, a HUS-1 was extensively damaged making a landing in rough terrain. After being hit by enemy fire while attempting to land in his primary zone, the pilot diverted to a secondary zone where his aircraft sustained major fuselage damage when it struck a tree stump. On 9 September, small-arms fire damaged a helicopter’s tail rotor, necessitating the removal and replacement of the complete tail rotor assembly.

The passing of responsibility for aircraft maintenance from the Marines to Air America accelerated in September. On 5 September, Air America assumed responsibility for the tool room. Supplies not desired by Air America were made ready for shipment back to MAG-16 on Okinawa. The following day saw the arrival of 10 additional Air America mechanics. They immediately began a six-day period of instruction on the HUS-1 provided by the Sikorsky technical representative. With Air America personnel assuming much of the maintenance workload, the Marines began preparations in earnest for their departure. On 8 September, six enlisted Marines detached and returned to MAG-16 on Okinawa. The following day, the MABS-16 maintenance officer was detached.

On 20 September, an Air America representative receipted for all maintenance equipment and supplies that were to be left behind. All maintenance equipment and supplies not required by Air America had by this time been inventoried and boxed for return to MAG-16 on Okinawa. Plans had been made for the orderly detachment of Marine personnel. At 1630 on 22 September, with a total of 54 personnel assigned to the maintenance department, Air America assumed all responsibility for aircraft maintenance. In the avionics shop, where Air America staffing was still inadequate to sustain operations, three Marines remained to assist and instruct where necessary. By the beginning of October, six additional civilian avionics employees had arrived. That brought the total civilian strength to 12, the same number to which the Marines had staffed the shop. With operations running satisfactorily and only infrequent assistance required, the Marine avionics personnel were phased out and returned to MAG-16 on Okinawa on 15 October 1961.28
Epilogue

The aircraft maintenance section's Marines were not the only ones planning for departure from Udorn. By early September, a plan had been finalized for the complete relief of MABS-16 and the assumption of duties by Air America. The plan was executed, with departures beginning in September and accelerating in October. Functions required to maintain operational capability were staffed with the minimum number of Marines until the very end. Some Marines assigned to the aviation maintenance section, as noted above, remained until the middle of October. Communications circuits remained open, and responsibility for the camp's internal phone system was not passed to Air America until late October. Other Marines remained, as required, until on 26 October 1961 the last remaining Marines departed Udorn.

It would not be long, however, before Marines in greater numbers returned to Thailand. In early 1962, greatly increased fighting broke out in Laos, with the very real threat that hostilities would spill across the border into Thailand. To ensure the territorial integrity of Thailand and to block the spread of Communism in Southeast Asia, the Marines returned to Thailand in Marine Expeditionary Unit strength. Marine involvement in Southeast Asia had begun in earnest.

Endnotes

1 Unless otherwise noted, the material in this monograph was derived from: MABS-16 (Rein) After Action Report "Report of Operation Millpond, Udorn, Thailand, March-October 1961, MABS-16 (Rein) dated 2 November 1961," hereafter MABS-16 AAR. This document can be found at the National Archives, RG127, Box 85, #19.


4 Tactical training for the Laotian Army was still being provided by French advisors.


6 Ibid.


8 MABS-16 AAR, p.1, encl 1.

9 Ibid.
10 Ibid.
13 MABS-16 AAR, p. 3, encl. 1. Page 5 of enclosure 1 states that the helicopters arrived on 28 March.
14 Personal observation by the author. On 6 April 1961, the New York Times reported that the
helicopters in use in Laos had been "recently delivered by United States Marines." "Laos Drops
also notes that "transport aircraft" were also delivered "to be piloted by Chinese Nationalists or
American employees of Air America." Although there is no record that these transports were
maintained by the Marines at Udorn, they frequently landed at the Udorn airfield and occasionally
displayed combat damage.
15 The author was then a private first class, telephone-teletype repairman assigned to the Comm.
Det, 3d MarDiv. He arrived on one of the first aircraft to land at Udorn and remained until 18
October 1961, being one of the last Marines to depart.
17 Ibid.
18 Ibid.
17.
21 MABS-16 AAR, encl. 2, p. 1.
22 Ibid.
23 Ibid., encl. 8, p. 3.
24 Ibid., pp. 5-6.
25 Initially, circuits were established between Udorn and the Marine commands on Okinawa and
Iwakuni, Japan. These were soon disestablished in favor of shorter circuits. Message traffic from
Udorn to Bangkok and NavComPacPhil was forwarded to its intended recipients from Bangkok
and the Philippines.
26 MABS-16, AAR, encl. 7, pp. 2-3.
27 Ibid., encl. 8, p. 1.
28 Ibid., app. 1, p. 4.
HEADQUARTERS
3d Marine Division (Rein), FMF
c/o Fleet Post Office
San Francisco, California

75/OW/jcj
1320.3
Ser: 295
22 March 1961

Original Orders

From: Commanding General
To: 1stLt John F. O'BRIEN 075968/2502 USMC
(Headquarters Battalion)

Subj: Temporary additional duty; Group Travel Orders

Ref: (a) Para 8002.2, MARCORMAN
(b) Para 4100, J. T. R.

Encl: (1) Roster of Personnel

1. In accordance with the authority contained in reference (a), on or about 22 March 1961 you will take charge of the personnel listed in enclosure (1) and report to the Commanding Officer, Marine Air Base Squadron-16 for temporary additional duty in connection with Marine Corps matters and such other temporary additional duty as the Commanding Officer of that Squadron may direct for a period of about sixteen (16) weeks. Upon completion and when directed by proper authority, you will return to your parent organization and resume your regular duties.

2. This temporary additional duty involves participation in field duty as defined in SECNAV Instruction 7220.24A. The Commanding Officer, Marine Air Base Squadron-16 is requested to indicate by endorsement hereon the time spent by you and the personnel in your charge in a field duty status.

3. You are directed to inform your Commanding Officer of the time and date of your departure. Upon completion of this temporary additional duty you will, within twenty-four hours, report the hour and date of return to your Commanding Officer.

4. You are directed to effect immunization and inoculation requirements in accordance with BUMED Instruction 6230.1B and to have in your possession your immunization card at all times during this period of temporary additional duty.

5. These orders are designated Group Travel Orders within the purview of reference (b). You are hereby designated Officer-in-Charge. Should it become necessary for personnel in your charge to travel separately, a copy of these orders countersigned by you will constitute original orders for the
Original Orders

6. If an emergency leave requirement occurs, you are directed to have the Commanding Officer, Marine Air Base Squadron-16 contact this Headquarters by message for appropriation data and travel order number for each case. This request will contain the individual's name, rank and service number. Five copies of orders issued will be sent to this Headquarters.

7. Individual equipment and T/O weapons will accompany each individual.

8. Expenditures incurred under these orders are chargeable to appropriation 1711106.2710, OAMC-61, TO #1397-61 for travel prior to 1Jul61, 1721106.2710, OAMC-62, TO #4-62 for travel subsequent to 30Jun61, OC 022/Off Tvl, 023/Enl Tvl, ENN 85011, ENN 67300, BKN 67400, BKN 11031. You are directed to report to the disbursing officer within seventy-two hours of your return for financial settlement of these orders. Estimated cost of per diem is $38.00.
### Original Orders

<table>
<thead>
<tr>
<th>NAME</th>
<th>BANK</th>
<th>SERNO/MOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMIX, Lindberg</td>
<td>GySgt</td>
<td>E6</td>
</tr>
<tr>
<td>ABRAZEL, Ronald G.</td>
<td>Cpl</td>
<td>XXXXXXX/XXXX</td>
</tr>
<tr>
<td>BANKERS, Eugene E.</td>
<td>Cpl</td>
<td>XXXXXXX/XXXX</td>
</tr>
<tr>
<td>CAMPBELL, Charles L.</td>
<td>Cpl</td>
<td>XXXXXXX/XXXX</td>
</tr>
<tr>
<td>ANDERSON, James B.</td>
<td>LCpl</td>
<td>XXXXXXX/XXXX</td>
</tr>
<tr>
<td>LITTLE, Larry A.</td>
<td>LCpl</td>
<td>XXXXXXX/XXXX</td>
</tr>
<tr>
<td>HÖRİCZ, Raymond J.</td>
<td>LCpl</td>
<td>XXXXXXX/XXXX</td>
</tr>
<tr>
<td>BELL, Ferris L.</td>
<td>Pfc</td>
<td>XXXXXXX/XXXX</td>
</tr>
<tr>
<td>BONACCI, Russel P.</td>
<td>Pfc</td>
<td>XXXXXXX/XXXX</td>
</tr>
<tr>
<td>BOYER, Robert J.</td>
<td>Pfc</td>
<td>XXXXXXX/XXXX</td>
</tr>
<tr>
<td>BUTLER, Warren W.</td>
<td>Pfc</td>
<td>XXXXXXX/XXXX</td>
</tr>
<tr>
<td>CECIL, Joseph K.</td>
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<td>HOFFMAN, George R. Jr.</td>
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<td>KOHLER, John M.</td>
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<tr>
<td>MČINTYRE, Radmul D.</td>
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<td>XXXXXXX/XXXX</td>
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<tr>
<td>POWELL, Bruce</td>
<td>Pfc</td>
<td>XXXXXXX/XXXX</td>
</tr>
</tbody>
</table>

ENCLOSURE (1)
The device reproduced on the back cover is the oldest military insignia in continuous use in the United States. It first appeared, as shown here (without the History Division text), on Marine Corps buttons adopted in 1804. With the stars changed to five points, this device is still in use on Marine Corps buttons.

Layout and design by Vincent J. Martinez, U.S. Marine Corps History Division, Editing & Design.