The perimeter was heavily wired with trip-flares to assist in detecting intruders. Unfortunately, there was no use of NODs despite their availability. Additionally, most of the perimeter observation towers were unusually low and several were set back from the perimeter, thus hindering effective observation of parts of the perimeter lines. Also, in June 1972, the base began the construction of 81mm mortar pits.

Physical protection in the MMS area had the potential of becoming highly effective. Higher towers and adequate fencing surrounded the area; unfortunately, several sections of lights were inoperative because required parts were on back order from supply. Large areas of the defense perimeter were dangerously darkened.

Nakhon Phanom RTAFB. NKP also had the usual rainy season vegetation problems, but heavy use of herbicides kept the growth under control in the fenced areas. Interior vegetation was usually kept closely cut. Lighting around the straight perimeter was excellent and NF-2 Light-All units were placed at the drainage ditches which went through the fences. High observation towers located close to the perimeter afforded excellent visibility at all points.

As previously mentioned, a limited BPS detection system was installed in 1971 around portions of the outer perimeter fence. Full coverage was planned for late 1972. The aircraft on the flight lines were generally
unrevetted and parked in line, which made them highly vulnerable to a stand-off attack or sabotage. However, the special Task Force Alpha Project, located on the base, was protected by high revetments and was thus impervious to all but direct hits.

Takhli RTAFB. When Takhli was reactivated in May 1972, a "bare-base defense" concept was implemented. Designed for locations where defenses were non-existent, the concept envisioned rapid deployment of fully-equipped security personnel. Defense personnel were drawn from the SPECS program and equipment was to have either been brought with the units or supplied from other PACAF resources. Unfortunately, in several cases the SPECS units came without any support equipment and in no case did they bring vehicles or communications equipment. Consequently, they were dependent on PACAF support. Extra equipment was drawn from several bases, including those in Thailand, but the timeliness and quality of the support was frequently less than desirable. For example, several battery chargers for the portable radios were inoperative when received, as was one of the M-60 machine guns. Ubon and NKP both sent base communications stations to Takhli, but both were received without any transistors or tubes. The mobile radio unit from Korat was inoperative when received.

On 15 May the base defenders, possessing only 15 portable radios, were severely limited due to the communications deficiencies. They received 29 more in early June, but there were over 100 defensive posts to be manned during the critical evening hours. Finally, on 1 July, Takhli received an additional shipment of 220 surplus radios from Vietnam.
Recognizing the critical communications problems, 7/13AF SP recommended that all future SPECS planning include four-channel radios in mobility equipment.

Takhli defenses were rebuilt by massive self-help operations using the TDY security forces. However, 13AF staff inspectors reemphasized the same admonition voiced earlier concerning the necessity to coordinate work order requests with Civil Engineering for support in constructing physical defense aids.

The single greatest problem faced by the defense unit was lack of vehicles. There were no tracked M113 armored personnel carriers available for Takhli. This restricted troop deployment during the rainy season. Of the four smaller personnel carriers the SPs had, only one was operative. In mid-June, over 55 percent of the few vehicles available were inoperative due to maintenance difficulties. The defense force had the use of only a few "M" series combat jeeps. However, the wing and base commanders had each indicated command interest in solving this problem by recalling such jeeps from other mission elements on the base.

Since the security forces did not wish to use them, the base made no use of trip-flares in its intrusion detection system. Nor were there any perimeter lights installed as of June, although a proposal had been submitted to 13AF for approval.

Lack of sufficient vehicles and communications equipment in the early days of the defense construction had severely hampered the defense posture.
Fortunately, that posture was not tested. The greatest remaining problems in June were the inadequate numbers of vehicles and the lack of perimeter lighting.

Ubon RTAFB. In the opinion of the defense personnel at Ubon RTAFB in 1972, the proximity of the perimeter defenses to the primary resources constituted a serious weakness at this base. At the point of penetration in June, the perimeter was less than 300 feet from the AC-130 parking revetments. This area compression limited the effective application of the three-defensive-ring concept and seriously limited the fields of fire. The type of perimeter fences varied; some sections of the fence consisted of two lines of triple concertina wire, while, in other sections, the fence was much less of a barrier.

Lighting on the perimeter was adequate under normal conditions, but heavy rain frequently shorted out large sections of the lights. Back-up Light-All units were in short supply, even during periods of heightened security. Ordinarily, 81mm mortars were available to provide illumination when needed. Unfortunately, observation devices were in short supply, and the base only had 12 NODs available. Four Xenon lights were on the base, but were not used either because the unit or its generator was inoperative, or the special binoculars were not functioning.

A BPS intrusion detection system was programmed for October 1972, and plans had been made to fence the close-in defensive perimeter.
The MMS area, six miles off-base, was defended in-depth with good fighting positions and excellent observation towers. It was probably the most secure MMS area in Thailand.

Ubon had undertaken a unique approach to solve one of its problems, that of controlling off-base vegetation. The ROE prohibited the use of herbicides outside the perimeter, but Base Civic Action undertook the project of having vegetation cleared 100 meters from the MMS area fence and had additionally contracted with local villagers to clear 150 meters of dense underbrush from around the base perimeter. The project was inexpensive, cleared a wide field for observation, and put money into the local villages, thereby helping to create good will.

Udorn RTAFB. Udorn City abutted a large area of the base, creating detection problems. The perimeter was also very close to the aircraft at several points, denying the defenders the necessary "battle room" to employ the three-defensive-rings technique. Describing the situation there, the chief of security police stated: "Internal defense is inadequate because of the geographic problems. We are just too small!"

Deep drainage canals, or "klongs," created further limitations on the detection ability, but a BPS was scheduled for installation in December 1972 to help alleviate some of those problems.

As previously mentioned, a long section of the perimeter was shared with commercial airlines, specifically, Air America and Continental Airways.
This section was not defended in-depth, but fencing and some bunkers were present. More active defense of this sector was planned after July.

The POL area was in a corner of the base next to the town. Several of the fuel storage tanks were less than 100 feet from civilian housing. The MMS areas, both off-base, were very small and vulnerable to attack. The interior munitions were revetted, but the openings to several of the revetments faced the fence, greatly limiting the effectiveness of that protection against a RPG attack.

The flight line area was well revetted, but there was little use of wire fencing to give depth to the close-in defenses.

U-Tapao RTNAF. Unlike Udorn and Ubon, which suffered from too little battle space, U-Tapao defenses were almost engulfed by territory. Such a massive amount of real estate forced dilution of both people and resources committed to the defense effort. That dilution contributed to the weaknesses demonstrated in January 1972. However, by June, the defense concepts were altered and the main line of resistance was planned around the middle defensive positions. Construction of physical barriers in this region and installation of lighting still lagged. A BPS was scheduled to ring the close-in aircraft area defenses, the MMS area, and the POL site. Pop-up mines had also been approved for those areas.

The base had another unusual problem. There was a Thai village located on the base inside the perimeter. This created difficulties, especially in pilferage control.
Vegetation control was all but impossible over the entire reservation. Vegetation control was further hindered by the inability of the base to get herbicides through supply channels during the entire first half of 1972.

Despite the eighteen and one-half miles of perimeter, U-Tapao possessed only six NODs, and of those, only two were operative. The typical vehicle maintenance difficulties also existed.

Essentially, U-Tapao's defenses were being restructured in mid-1972 in response to the lessons learned during the January attack. The plans had been made and the defense forces were occupied in constructing the physical barriers to prevent another penetration attempt by the enemy.
In 1968, air base defense in Thailand was in its infancy. A series of daring sapper attacks over the next four years did much to hasten the evolution of defense concepts that were adapted in the effort to protect vital USAF resources from such surreptitious assaults.

The Director of Security Police, 7/13AF, tasked each base to develop a plan stressing flexibility within certain set standards in preparing their defenses. Although forced to counter the enemy threat from behind static defense lines, base security forces demonstrated positive and innovative thinking in reassessing and strengthening the physical fortifications of the installations. Continuing consideration was given to more effective utilization of the limited personnel and equipment resources available. Various deficiencies existed, but they were recognized, and command concern was focused on their elimination.

If any lag in response to a perceived enemy threat existed, it was in the preparation of effective countermeasures to enemy action other than sapper attacks. Circulation control in flight line, POL, and MMS areas to protect against a sabotage threat was often inadequate. Also, the risk of stand-off attack was not matched by effective defenses. As was observed in Vietnam in 1969, "The stronger USAF internal base defense forces have become, the more the enemy has relied on stand-off attacks, and the
threat of penetration by sapper squads has diminished. Unfortunately, the best security against such a threat was beyond the control of the USAF; a vigorous and regular presence by friendly armed forces in areas around the external perimeter of the bases would have provided a powerful deterrent to any hostile activity, but adequate RTG presence was often lacking.

Security for the more obvious aircraft targets was generally good, but in other areas also important to the combat mission, it was often unsatisfactory. This deficiency was commonly justified on the premise that defense resources were limited and "the enemy had never chosen to destroy fuel or munitions before." Of course, history has recorded many attacks that were "the first of their kind." Fortunately, such "reaction-type" planning was the exception and not the rule in Thailand base defense, and the vulnerability of such targets was recognized.

Perhaps the best example of the attitude taken toward security on the Thai bases was stated in late May 1972 by the senior USAF Security Policeman in the country.

Prime attention and interest has been rightly focused on base perimeter defense and the capability to detect and deal with hostile forces at this point long before they have a chance to get to vital mission resources. We have, however, at the same time failed in some cases to provide adequate attention and security coverage around and adjacent to vital mission resources. Without jeopardizing our perimeter defense, we must take a close look at the security being provided aircraft and essential mission items. In looking at this problem we must take into consideration factors which limit our control over who comes and goes on base and our resulting lack of knowledge of who may be secluded on
base at the end of the day. We must also consider penetration of our defense and security through use of subterfuge as well as outright undetected penetration of the perimeter defense. Our circulation control, security coverage and placement of sentries in and around those areas must be such that it insures that we detect and deal with hostile elements before they destroy our resources. We must be as well prepared as our security force, equipment and the situation will permit. . . .