Final Search and Recovery Report CIL 2009-149, an F-100D Crash Site Associated with REFNO 1374, Ban Phoun Village, Vilabouli District, Savannakhet Province, Lao People's Democratic Republic, 20 October Through 14 November 2009

JPAC CENTRAL IDENTIFICATION LABORATORY

29 December 2009

INTRODUCTION

From 20 October through 14 November 2009, during the 111th Joint Field Activity (JFA) (10-1LA), Recovery Team Two (RT2), a joint United States/Lao People's Democratic Republic (U.S./L.P.D.R.) team excavated an F-100D crash site associated with REFNO 1374 near the village of Ban Phoun, Vilabouli District, Savannakhet Province, L.P.D.R. (Figure 1). The team excavated 428 m^2 of the site to an average depth of 15 cm below surface (cmbs). The team recovered possible human remains, possible life-support equipment, possible material evidence, and minor quantities of aircraft wreckage. The Recovery Leader/Anthropologist (RL/A) closed the site on 14 November 2009 and recommends no further excavation at this location. The possible human remains, as well as the possible material evidence and possible life-support equipment recovered during 10-1LA, were accessioned into the JPAC-CIL as CIL 2009-149 on 17 November 2009.

BACKGROUND

REFNO 1374 involves the 8 February 1969 crash of an F-100D aircraft while on a combat mission over Laos. The aircraft was hit by enemy ground fire and was observed to burst into flames and crash (JPAC J2 Recovery Assessment, Case 1374, dtd 16 July 2008).

On 12 February 1991 during the 18th JFA (92-3LA) a Joint U.S.-L.P.D.R. team interviewed a Mr. Wan who indicated that he had found a revolver approximately 12 m west of a possible impact crater that had an aircraft engine exposed. Mr. Wan also indicated that he had seen camouflaged green uniform fragments on the site but did not specify their location. Mr. Wan first visited the crash site in 1974 and indicated that the local villagers had salvaged the metal in 1987 (REF: JCRC LIASON, BANGKOK, TH, 271259Z Feb 91, SUBJ: Interview with Resident of Ban Poung Village During Crash Site Survey in Laos [REFNO 1374]).

The REFNO 1374 site was excavated by a team from the Joint Task Force-Full Accounting and the U.S. Army Central Identification Laboratory-Hawaii in 1992 (92-3LA). The excavations lasted approximately five days, and life support materials and aircraft wreckage were recovered. No formal report, maps, or photographs are available from that excavation, although a message

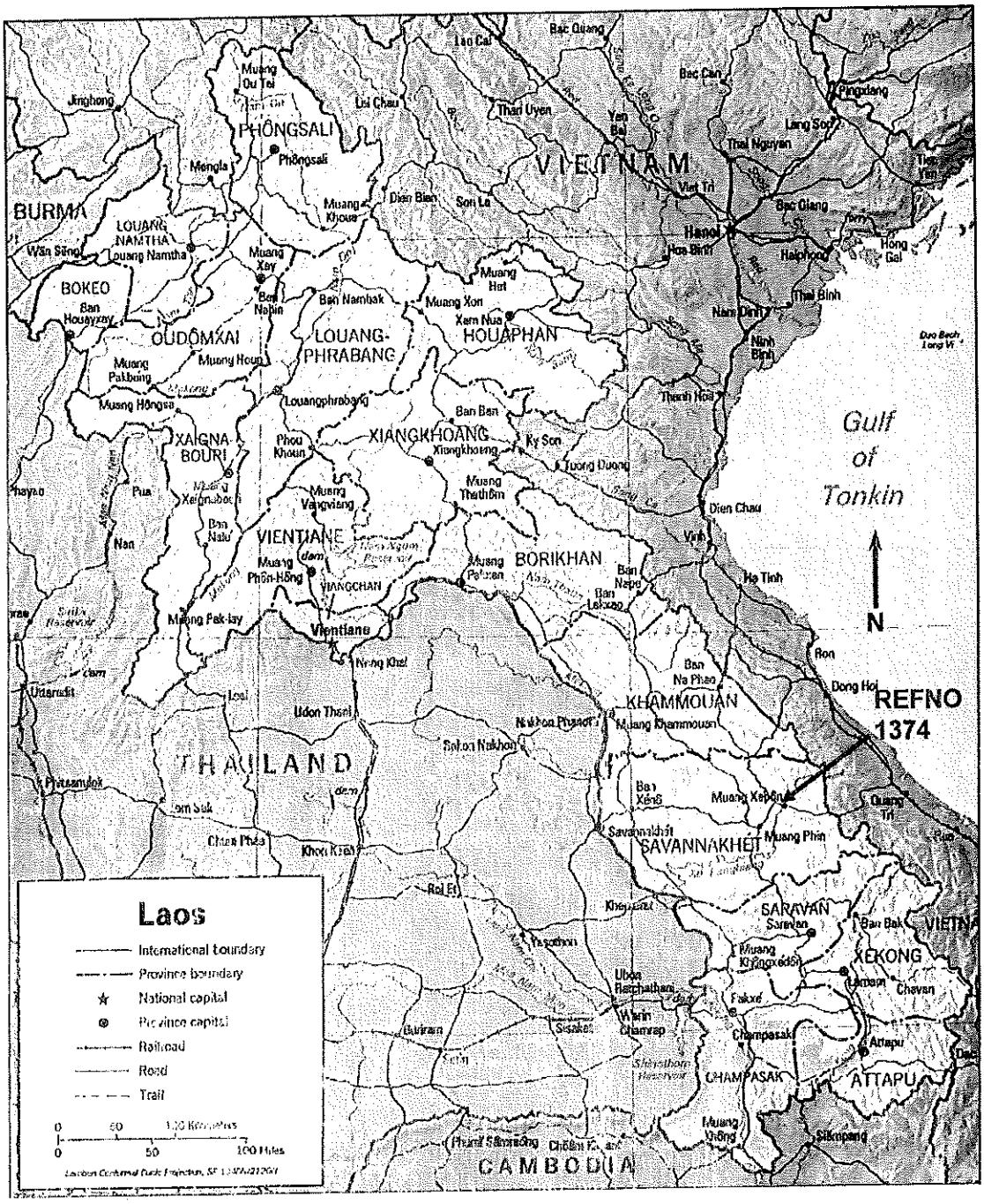


Figure 1. Geopolitical map of Laos identifying the general location of the REFNO 1374 recovery scene.

traffic report was completed (REF: CJTF FA DET ONE Bangkok, TH, 270922Z Feb 92, SUBJ: Detailed Report of Recovery: Case 1374).

Based on the message traffic report, the 1992 team excavated a total of 292 square meters including a 4-x-5-m unit in an impact crater. The report indicates that all units were excavated to sterile sediments. Based on testimony of witnesses available from Ban Phoun, the team excavated 28 square meters (one 2-x-2-m and three 2-x-4-m units) approximately 5 m northwest of the impact crater where a witness had found an identification tag and a fragment of a burned identification card. The precise location of these excavation units outside of the impact crater could not be determined during the 10-1LA recovery effort.

Additional survey at the site was conducted during the 06-1LA JFA in October of 2005 by an Investigation Team (IT) from JPAC (REF: JPAC ANNEX CAMP SMITH HI, 302102Z Mar 06, SUBJ: Detailed Report of Investigation of Case 1374). The team observed minor amounts of aircraft wreckage and possible life-support materials. The IT team produced a generalized sketch map but did not identify the location of the previously excavated impact crater or provide specific excavation recommendations.

RECOVERY SCENE LOCATION

The recovery scene associated with REFNO 1374 is located near Ban Phoun, Vilabouli District, Savannakhet Province, L.P.D.R. (Figure 2). This location is at Military Grid Reference System (MGRS) GC: 48Q XD 13711 60058, determined using a Garmin Global Positioning System (GPS) GPSMAP 60CSx receiver, tracking six satellites using the Indian-Thailand mapping datum (± 6 m error), and 48Q XD 13291 60373 using the WGS-84 mapping datum tracking six satellites with an error of plus or minus seven meters. These grid coordinates are at the site datum (500N-500E). The site elevation is 248 meters above mean sea level as determined using the same GPS receiver. The applicable topographic map is: Name: Ban Vang Phong; Sheet: 6242 IV; Series: L7015; Edition: 5-TPC; Scale: 1:50,000; Datum: Indian Datum 1960.

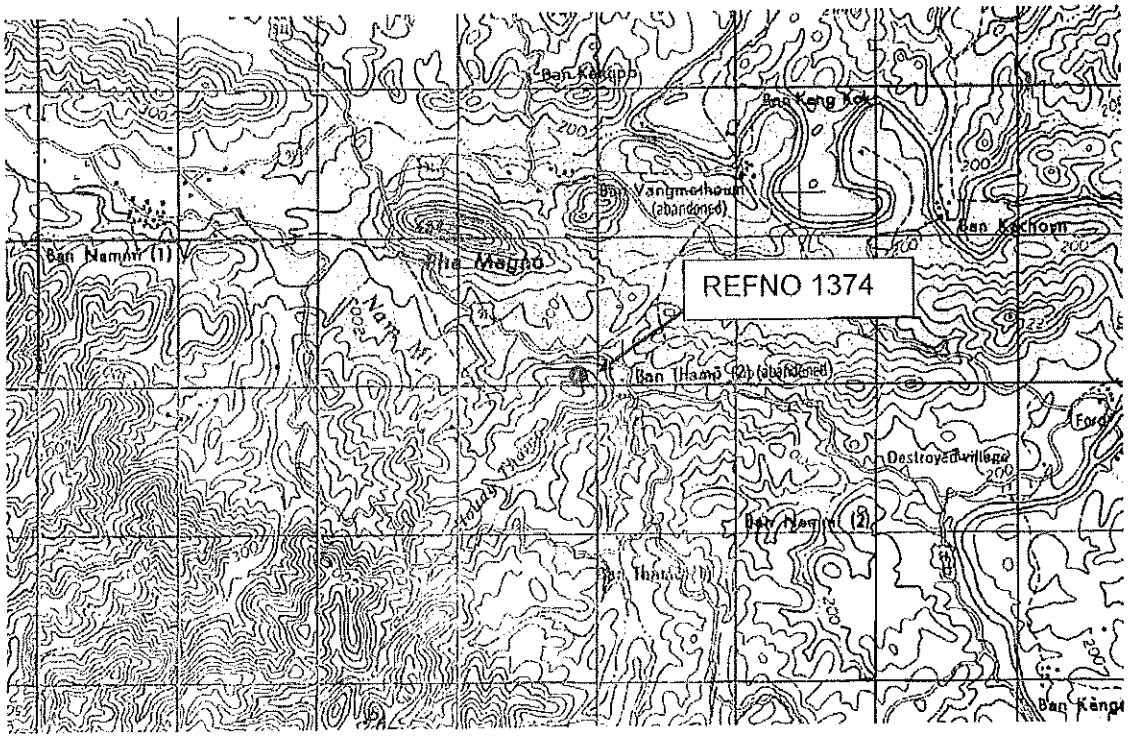


Figure 2. Topographic map location of the REFNO 1374 recovery scene (Map Name: Ban Vang Phoug; Sheet: 6242 IV; Series: L7015; Edition: 5-TPC; Scale: 1:50,000; Datum: Indian Datum 1960). The grid squares are one kilometer.

DESCRIPTION OF RECOVERY SCENE

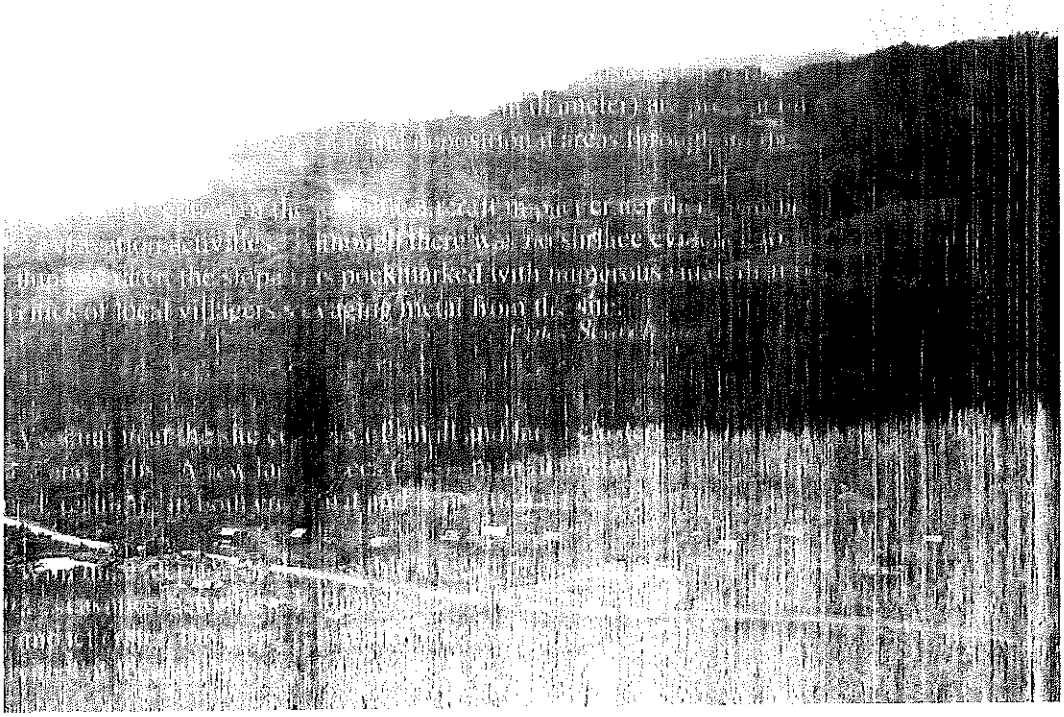
The site is situated on the right bank of the Nam Mi stream on the northern slope of an isolated east-west trending ridge (Figure 3). The site is approximately 60 m up the slope from the intersection of the T-1 terrace and the base of the ridge. The slope exhibits a number of bomb craters, and there is a complex of trenches, fighting positions, and bunkers on the ridge crest. Although recorded by the IT as a 15 degree slope, the slope in reality is between 45 and 50 degrees.

Among the bomb craters is a large impact crater approximately 8.4 m north to south by 3.9 m east to west. This is the impact crater excavated in 1992. A four-meter-wide straight-walled excavation area is visible at the northern end of the impact crater. The upslope wall of the crater was excavated and stepped and is approximately four and one-half meters tall, which is consistent with the dimensions described in the 1992 message report.

Surface distribution of aircraft debris at the site was extremely low due to reported extensive metal salvage at the site by local villagers. Regardless, northwest of the impact crater the surface density of aircraft debris was markedly higher than in all other areas of the site.

Vegetation at the site consists of small and large clusters of bamboo, small trees, saplings, vines, and forbs. A few larger trees (> 20 cm in diameter) are present on the slope. The slope is varied, resulting in both erosional and depositional areas throughout the site.

With the exception of the possible aircraft impact crater there was no clear evidence for the 1992 excavation activities. Although there was no surface evidence for excavations outside of the impact crater, the slope was pockmarked with numerous small disturbances representing activities of local villagers salvaging metal from the site.



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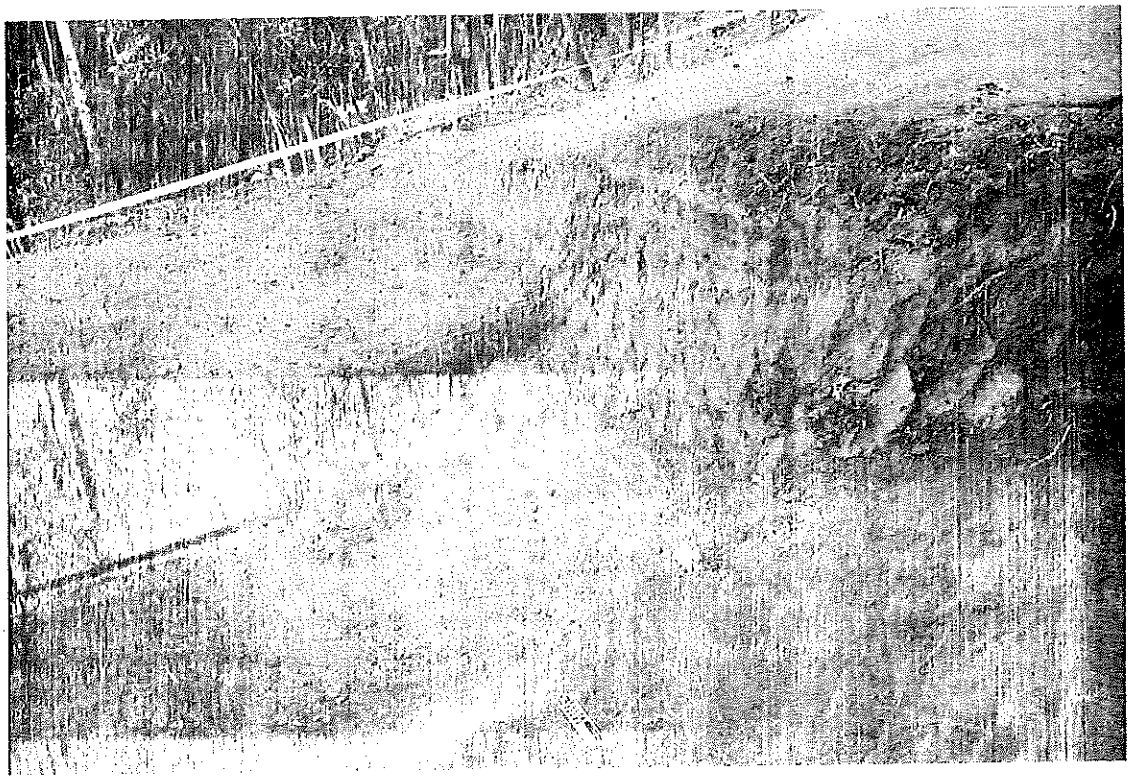
of aircraft related materials were recorded between 20 and 40 meters along the baseline. Between 40 and 60 m along the baseline the most frequently occurring materials were bomb fragments not associated with the aircraft crash. Life-support materials, material evidence, or possible remains were not observed along this transect.

Three additional transects to the south were cut and surveyed upslope from the east-west base line at the 0, 20, 40, and 60 m intervals. These transects also were metal detected and the 40 m and 60 m transects were metal detected, then metal-detector signals were excavated. The 20 m south transect ran primarily up the north-south erosional gully that began in the excavated impact crater, and this transect was surveyed but not excavated. These north-south transects also were segmented into 20 m intervals. Materials recorded along the 40 m and 60 m transects contained both bomb fragments and aircraft debris. Possible material evidence, possible life-support materials, and possible human or osseous remains were not observed along these transects. One final transect was surveyed and excavated between the 20 m and 40 m stakes on the baseline. This transect was located 20 m south of the initial baseline. Minor amounts of aircraft debris and a higher number of bomb fragments were observed along this transect. Possible material evidence, possible life support, and possible human or osseous remains were not observed along this transect.

Additional metal detector surveys were conducted to the east of the gully that began in the impact crater. These surveys revealed a very low density of aircraft debris mixed with bomb fragments to the east of the gully.

Subsequent to completing the lower slope transect survey, the RL/A began clean-out excavations of the previously excavated possible impact crater to determine if the 1992 excavations had reached incident-sterile sediments. Shovel-skimming of the floor and walls of the large depression revealed the presence of a homogenous, compact orange/tan dense clay with no presence of metal or other crash related materials (Figure 4). The base of the excavated impact crater was filled with back dirt from the 1992 screening operations. A 400 bucket sample of the excavated and previously screened sediments was screened by the team to evaluate the contents of these sediments. All recovered materials consisted of small fragments of aircraft debris and oxidized aluminum fragments. The mixture of sterile clay clumps, and granular, fine-grained, unconsolidated brown/dark brown sandy loams confirmed that the sediments had been previously screened. Consequently, no further work was planned within the boundaries of the possible impact crater.

Due to the extremely low density of aircraft debris on the surface, the team, with the assistance of local Lao workers, cleared an area extending approximately 20 m east of the previously excavated impact crater, down slope approximately 30 m, west of the crater approximately 24 m, and south up slope approximately 40 m. Upon clearing, a pedestrian reconnaissance was conducted, again indicating a very low frequency of aircraft-related debris. The RL/A then established a 24-x-24 m excavation grid of 4-x-4-m units with the 500N-500E stake placed approximately 5 m northwest of the northwestern edge of the excavated crater. The grid was oriented to the topography with grid north established at eight (8) degrees east of north. The 500N-500E datum stake is located at (MGRS) GC: 48Q XD 13711 60058 as determined by a Garmin Global Positioning System (GPS) GPSMAP 60CSx receiver, tracking six satellites



[illegible] impact crater from 1992 excavations, view northeast. Screened [illegible] excavation was re-excavated to [illegible] straight eastern wall and flat [illegible]

[illegible] Thailand mapping datum (± 7 m estimated position error [EPE]), and 48Q XD [illegible] the WGS 84 mapping datum tracking six satellites with an EPE of ± 6 m. [illegible] was tied into two trees, both of which the team painted red. The reference [illegible] of the datum was [illegible] 2 m away on a bearing of 340 degrees east of [illegible] reference tree to the [illegible] was located 6.8 m away on a bearing of 60 degrees east [illegible]

[illegible] message-traffic report indicated that the recovery team had excavated in [illegible] five meters northwest of the excavated impact crater in an area where a [illegible] ed an identification tag and a fragment of a burned identification card. The [illegible] was established with the 500N-500E datum stake located along the potential [illegible] this area.

[illegible] Wahn (Wan) Vilayphon [illegible] over a pistol to the excavation team in [illegible] team did not [illegible] location of the pistol, although a 1991 investigation [illegible] informant had [illegible] the pistol approximately 12 m west of the impact crater. Mr. Vilayphon [illegible] the RL back to the reported location and the team cleared the area. A systematic metal detector survey of this area revealed multiple metal detector signals. Thirty signals [illegible] excavated but the only metal identified was bomb fragments and no aircraft

debris. This area was not considered suitable for intensive recovery efforts because aircraft debris and other types of evidence associated with the incident were totally absent.

Concurrent with establishing the excavation grid, the team constructed a slotted floor dry screening station with sixteen screens. All excavated sediments were screened through one-quarter in mesh with American team members monitoring one to two screens at a time. Local Lao laborers assisted in the screening process. Excavated sediments were transported to the screens in buckets via a human bucket line where they were stockpiled until screened. Two units in and around the excavated crater had mixed subsurface clay deposits overlying a buried soil horizon. Sediments from these units were temporarily stockpiled, dried, and were subsequently screened. All materials remaining in the screens after removal of sediments, roots, leaves and large rocks were placed into buckets and were examined by the RL/A, Forensic Science Academy Fellows, and the Life Support Investigator (LSI). Possible life-support materials, possible material evidence, and possible remains were retained by either the LSI or the RL/A.

All excavations were conducted to incident-sterile sediments. Depths of the excavations were based on the presence or absence of metal in a sandy clay underlying the sandy lower uppermost layer of sediment. Incident-sterile sediments were identified using a metal detector to determine if excavation *unit* depths had reached a depth below surface that did not include any aircraft debris. All excavated units were excavated to an average of 15 cmbs and surveyed with a metal detector. If metal was present the unit was excavated deeper until all metal had been removed.

Since the 1992 excavation team indicated that the impact crater contained the engine of the incident aircraft the RL/A began excavations with a series of 4-x-4-m units around the periphery of the crater. Based on the lack of relevant evidence recovered from those excavations, coupled with the general location of the 1992 excavations which did recover relevant evidence, the RL/A directed excavations to proceed to the west and northwest of the impact crater.

Throughout the recovery project the RL/A maintained daily field notes and produced a plan map of the excavations. The RL/A also maintained an evidence log and drew sediment profiles as warranted. The RL/A maintained all evidence in a secure location and completed appropriate documentation for the transport of materials to the JPAC-CIL. The team photographer routinely documented the excavation activities with digital photography and maintained a photo log throughout the mission. Six local guards provided 24-hour security at the site during the project by maintaining a guard post adjacent to the excavation area.

Excavated non-evidentiary aircraft debris was removed from the site location at the end of the mission to the team's guesthouse in Xephon where it was discarded into trash barrels which were subsequently transported to the local dump site.

ARCHAEOLOGICAL FINDINGS

A total of 428 square meters were excavated to incident-sterile soils during 10-1LA excavation activities (Figure 5). No recommendations for a specific excavation area were provided in the 2005 IT report. Clean out activities by RT2 in the possible impact crater revealed evidence that not only had the 1992 excavation team excavated the crater to incident sterile soil (see Figure 4), but that the earlier team had apparently used that location and others down slope to the northwest and east of the crater as screening stations.

One informant who had previously been interviewed in 1992, Mr. Vahn Vilayphone (spelled Mr. Wan in the 1992 report), provided a consistent story about finding a revolver at the site. He was very inconsistent in other areas of his statement regarding where the impact crater was and where he had found the pistol. Mr. Vilayphone took the team to a location approximately 25 m above the impact crater and noted that he had found the revolver at that location (see Figure 5). Mr. Vilayphone indicated that he was referencing the revolver location based on the position of two recently fallen leaning trees. This location was approximately 30 to 35 m south of where he had previously informed JTF-FA interviewers that he had found the pistol in 1991. In 1991 Mr. Vilayphone indicated he had located the pistol approximately 12 m west of the impact crater.

During the 10-1LA excavations a metal detector survey was initiated in the area where Mr. Vilayphone reported he had found the pistol. Excavation of a significant number of metal detector signals indicated that no aircraft wreckage was in or near this location, as all metal observed was bomb fragments. Based on his previous 1992 statement, the location of a concentration of life support recovered north (down slope) of the impact crater, and the results of the metal detector survey excavation during 10-1LA, Mr. Vilayphone's 2009 location was considered to be erroneous, because no incident-related materials were in the designated area he associated with the pistol location. Due to this error of location, no further work was conducted at the 2009 location.

The second informant interviewed by RT2, Mr. Khamai, had no direct knowledge about the site. In 1992 his wife led the excavation team to an area where she claimed to have found an identification tag (subsequently lost) and a pocketknife. Mr. Khamai led the team over the top of the ridge to the south where he indicated his wife had found the identification tag. Mr. Khamai did not have specific knowledge about the identification tag location. The interview conducted in 1992 was with his wife who had directed the 1992 team to a location on the north side of the ridge down slope from the impact crater in the area of the life-support concentration identified in 1992 and 2009. Since Mr. Khamai had led the team to a location completely outside of the distribution of aircraft debris and other incident-related materials, his information was considered as unreliable. Consequently, no work was conducted in the area identified by Mr. Khamai in 2009.

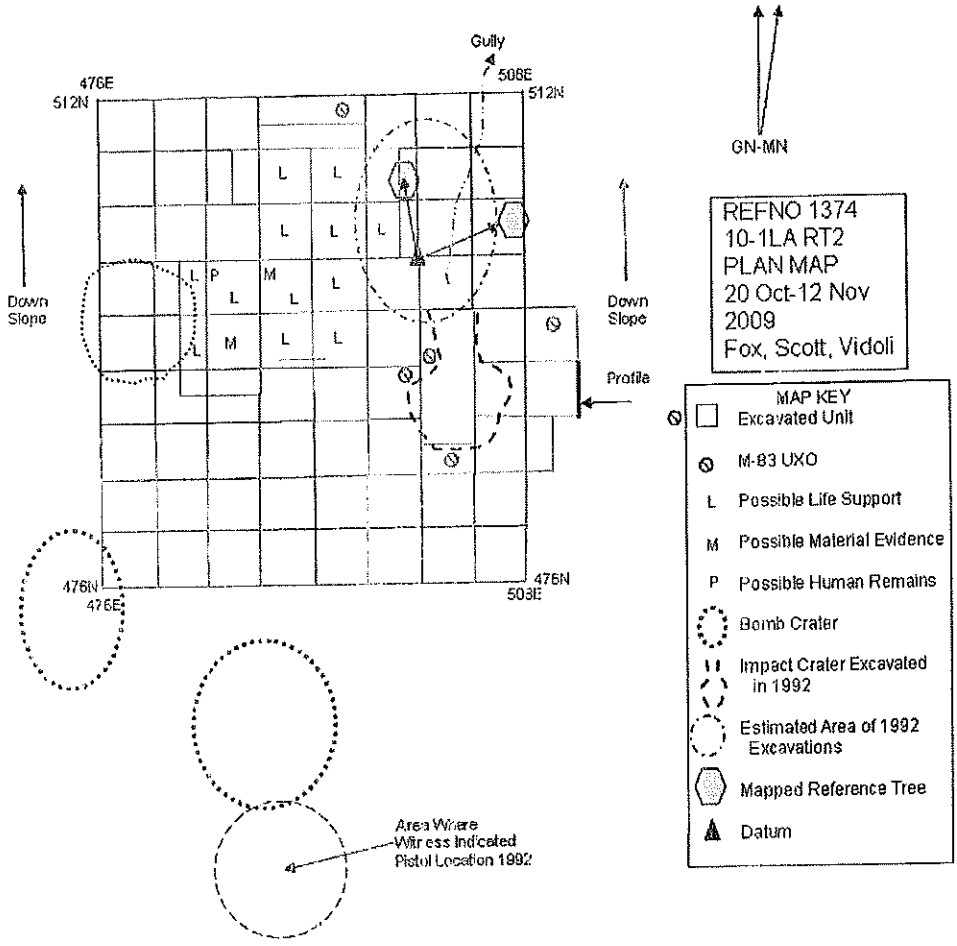


Figure 5. Plan map of excavations at REFNO 1374.

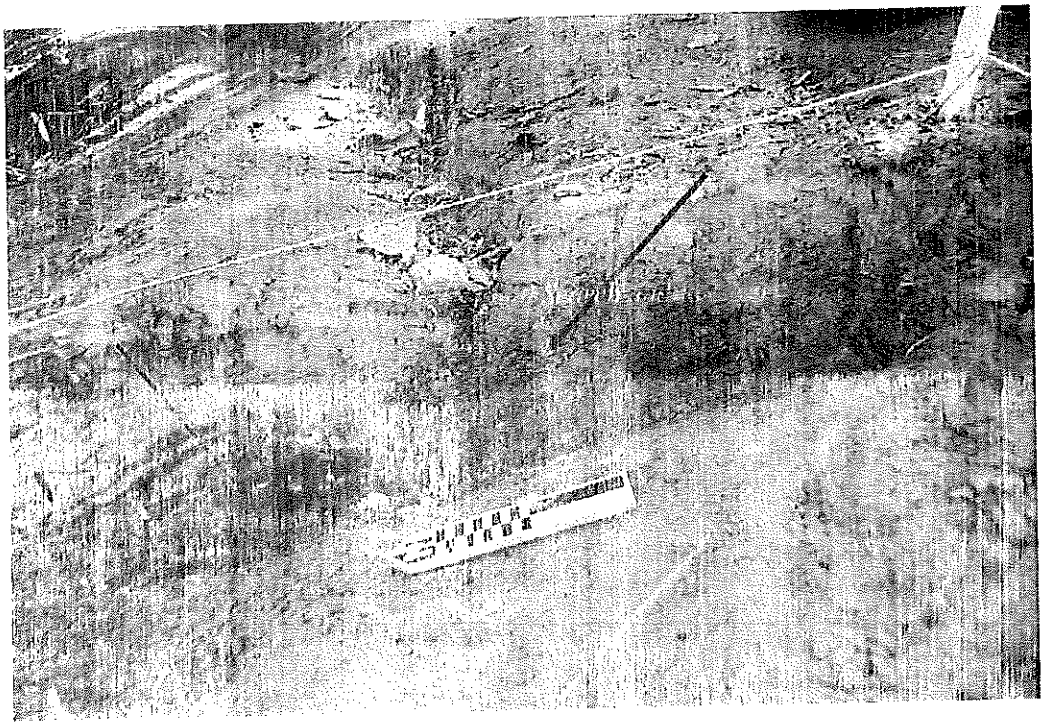
Given that the 2005 IT had indicated the site extended down slope to the T-1 terrace, the team initiated a transect metal detector survey with an east-west base line located on that terrace at the base of the north-facing slope. Excavation of metal detector signals revealed the presence of minor amounts of aircraft debris and bomb fragments. The highest frequency of aircraft debris was observed within the 20-40 m segment of the baseline. North to south transects in 20 m intervals on the east-west baseline to the elevation of the reported impact crater also contained minor amounts of aircraft debris that increased in frequency to the south (up slope). An east-west transect 20 m up slope from the terrace revealed a nearly equal distribution of life-support and bomb fragments between the 20-40 m segment on the east-west baseline. Relevant evidence (i.e., possible life-support materials, material evidence, or possible remains) were not observed along any of the surveyed transects.

Excavations in and around the impact crater failed to yield relevant evidence (e.g., possible life-support materials, material evidence, or remains). Since the transect survey had produced results indicating the main concentration of materials was between 20-40 m west on the baseline, an area to the west of the impact crater, excavations were conducted in that direction. These excavations revealed a concentration of life-support materials in an area approximately 16 m north to south by 12 m east to west. The highest concentration of materials was located in unit 496N-488E. The frequency of materials was lower both to the north and south as well as the east and west. Excavations were conducted beyond the life support concentrations with three notable exceptions.

As noted previously, the site had been excavated in 1992 and a total of 272 square meters had been excavated outside of the crater. In addition, local villagers have conducted extensive subsurface salvage excavations to recover metal from the aircraft crash site. In unit 496N-484E, there were numerous "potholes" resulting from locale salvage activities. Evidence for such an excavation was observed as sediments deposited directly into the bomb crater at the eastern margin of the excavation grid. Excavation of a 2-x-4-m unit (496N-482E, within the margins of the bomb crater) revealed a mass of excavated sediments from 496N-484E. These sediments lay directly on top of the basal clay exposed by the bomb blast. The margin of the excavated back dirt stopped short of the western edge of the 2-x-4-m unit. The single item of life support in 496N-484E, a microphone connecter, had been removed by salvagers from the unit to the east and deposited on top of the sterile clay in the bomb crater with the back dirt. Since the source of the material could be directly attributed to salvage excavations to the east, this situation created the first exception to placing a buffer unit beyond the recovery of relevant evidence.

The second exception to not placing a buffer unit relates to the unit directly south of 496N-482E. A buffer unit was not completed adjacent to 494N-482E, containing a strap adjuster and a safety pin clasp, because the eastern one third of the unit was the southwestern corner of the bomb crater where a vertical wall of basal clay approximately two meters high was exposed. Since this bomb crater post-dates the crash incident (see below) it was considered to be of negligible value to excavate a post-event disturbance. Unit 494N-482E was buffered to the south with a 2-x-2-m unit.

The third exception to excavating a buffer unit relates to units 496N-496E, a 4-x-4-m unit and 500N-496E, a 2-x-4-m unit. As noted above, this area appeared to be within the 272 square meters excavated in 1992. In unit 496N-496E (Figure 6), a 20 cm deep cap of mixed basal clay and upper sediments overlay the tan sandy clay that was consistently interpreted as the incident sterile horizon throughout the site (Figure 6). This horizon was a brown sandy loam typically present in undisturbed areas of the site and was notably missing, indicating that it had been removed at some point, most likely through the mechanism of the 1992 excavations. In 500N-496E there was a mixed layer of sediments overlying the tan sandy clay (Figure 7). These sediments were unconsolidated, granular, and had the appearance of screened sediments. Two significant items were recovered from the excavated fill, a small fragment of zipper and a safety pin clasp. Both of these items were small enough to pass through a one-quarter inch screen and most likely represent a loss during screening. A buffer to the east of both of these units was not excavated, as the eastern wall of both units exhibit a sediment profile indicating that the 1992 excavation continued to the east.



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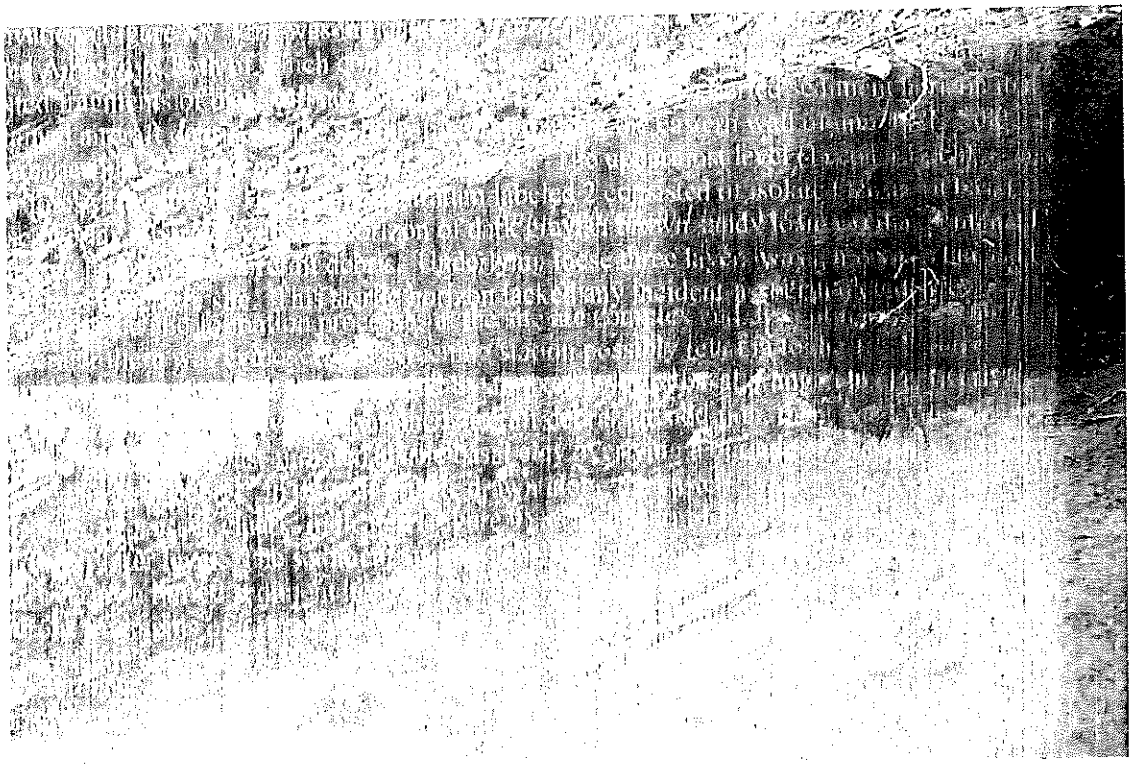
Disturbance and formation processes at the site are complex and discontinuous. To the east of the crater there was evidence of a screening station possibly relating to the 1992 crater excavation (Figure 8). This was indicated by a mixed layer of basal orange/tan clay overlying a buried A horizon, both of which contained aircraft debris. In addition, there was evidence of isolated fragments of blast-turbated sterile basal clay overlying a buried sediment horizon that contained aircraft debris. In the soil profile drawn along the eastern wall of unit 488N-508E, this disturbance process is clearly indicated (Figure 9). The uppermost level (1) consisted of a sandy loam/forest litter level. The sediment stratum labeled 2 consisted of isolated lenses of basal clay. These overlay a buried sediment horizon of dark grayish brown sandy loam (3) that contained numerous fragments of aircraft debris. Underlying these three layers was a brown to tan sandy clay across the entire site. This sterile horizon lacked any incident-associated evidence.



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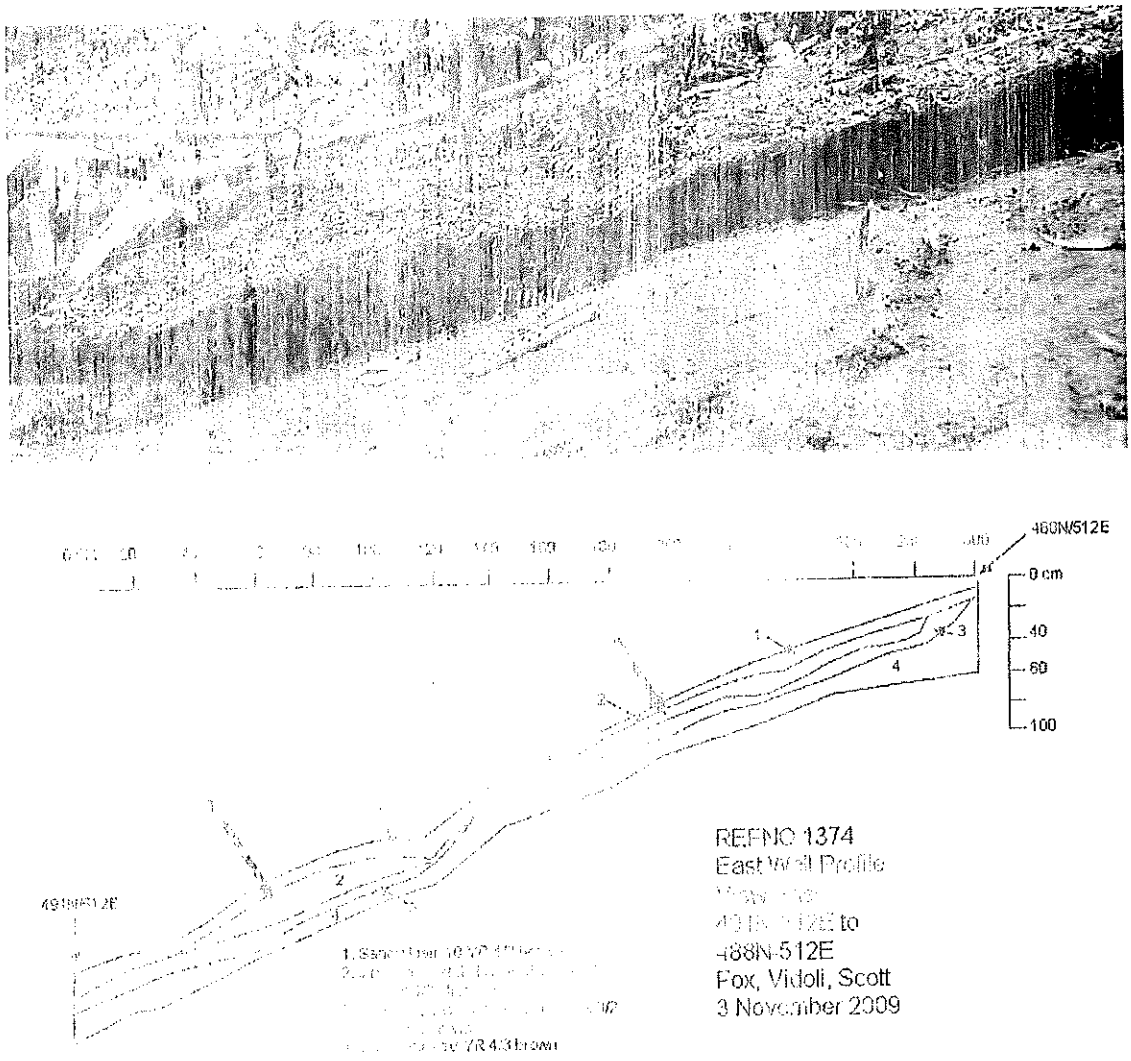

Figure 9. Soil profile, east wall of 488N-512E, view east. Red arrows indicate blast turbation-deposited sediments.

Further evidence that at least a portion of the bomb craters in and around the site post date the crash incident were revealed in a number of excavation unit walls. Along the south wall of the excavations in the southwestern portion of the investigated area, large areas of basal clay overlay the pre-incident surface. These clay layers were sterile; however, aircraft debris typically was found in the layer directly below the clay layers.

Evidence recovered during the 10-1LA mission included possible human remains (Table 1), possible life-support equipment (Table 2), and possible material evidence (Table 3). Life-support equipment is consistent with U.S. military equipment issued to pilots during the Vietnam Conflict. These items include a closed lap belt buckle, elements of the helmet, uniform/G-suit fragments, survival vest fragments, miscellaneous zippers, and survival kit fragments. Material evidence included both a U.S. military-issued watch back and a 1967 Lincoln Penny. The penny provided a *terminus post quem* of 1967, a date some two years before the crash incident.

Table 1. Possible human remains recovered.

Excavation Unit	Depth (cmbs)	Material Recovered
496N-484E	0-15	Dental remains

Table 2. Possible life-support equipment recovered.

Excavation Unit	Depth (cmbs)	Material Recovered
496N-482E	0-15	Microphone connector (from metal salvage back dirt)
492N-482E	0-20	Harness adjuster, safety pin clasp
496N-484E	0-20	Lap belt buckle, survival radio speaker
504N-488E	0-15	Zipper fragment with OD green fabric basting
500N-488E	0-15	Possible G-suit zipper with fabric, zipper, webbing fragment, possible parachute or torso harness, lap belt buckle
496N-488E	0-15	Hook and pile from seat pad, pocket fragment from survival vest, webbing-possible torso harness, possible G-suit fragments, survival vest fragments, zipper, multiple zipper fragments
492N-488E	0-15	Possible helmet visor fragments
504N-492E	0-15	Zipper, small male snap (lost)
500N-492E	0-15	Survival vest zipper, possible G-suit material, zipper
496N-492E	0-15	Possible G-suit material, stainless steel male snap, zipper pull
492N-492E	0-10	Possible hook and pile attached to Nomex fabric
500N-496E	0-15	Safety pin clasps, zipper (from 1992 back dirt)

Table 3. Possible material evidence recovered.

Excavation Unit	Depth (cmbs)	Material Recovered
496N-488E	0-15	1967 Lincoln Penny
492N-484E	0-20	Watch back

Aircraft debris and bomb fragments recovered from the site consisted of very small fragments of aircraft skin, electronic parts, aircraft frame fragments, fiberglass, insulated wire, miscellaneous unidentifiable parts, and oxidized aluminum (Figure 10). There were no large aircraft debris fragments observed or recovered during the 10-1LA excavation and screening process. This result is typical of a heavily scavenged aircraft crash site in Southeast Asia.

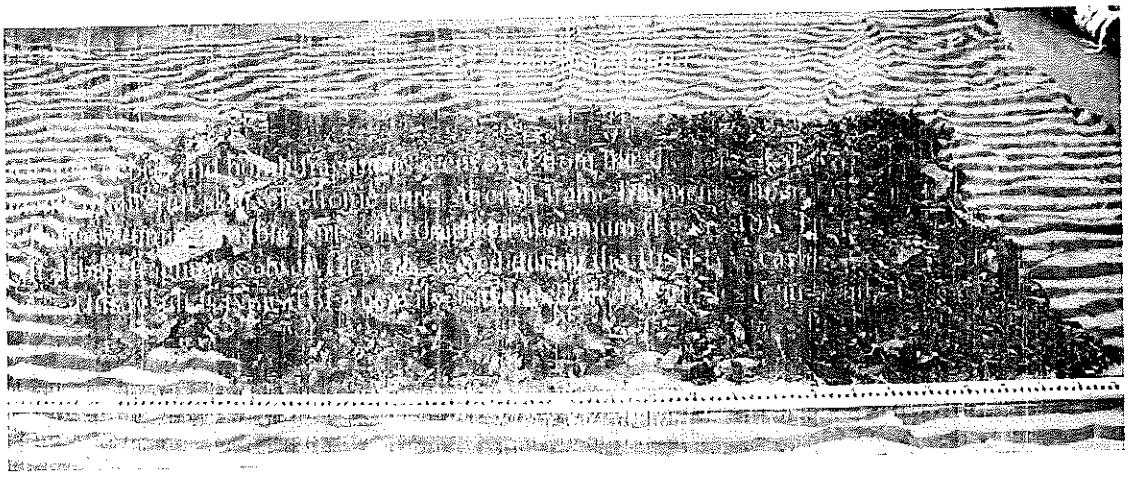

Figure 10 Aircraft debris and bomb fragments recovered from the 10-1LA excavations.

In summary, this site has been heavily disturbed since the crash event bombing and extensive metal salvaging by local villagers. Excavations conducted in 1992 recovered life-support materials and identification media that exclusively correlated the site to the REFNO 1374 incident. The 1992 team excavated approximately 237 square meters. With the exception of the impact crater, the exact location of previous excavations could not be determined, although the general area was identified based on soil disturbances. Excavations during the 10-1LA project (Figures 11 and 12) resulted in the recovery of all evidence within the probable core area of life-support distribution.

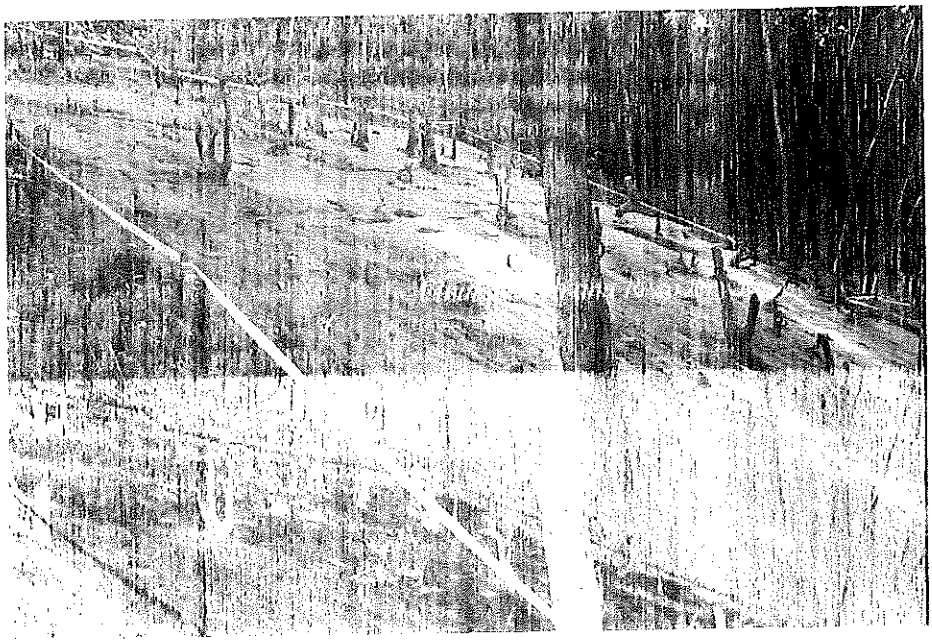

Figure 11. [illegible] **contained** [illegible]

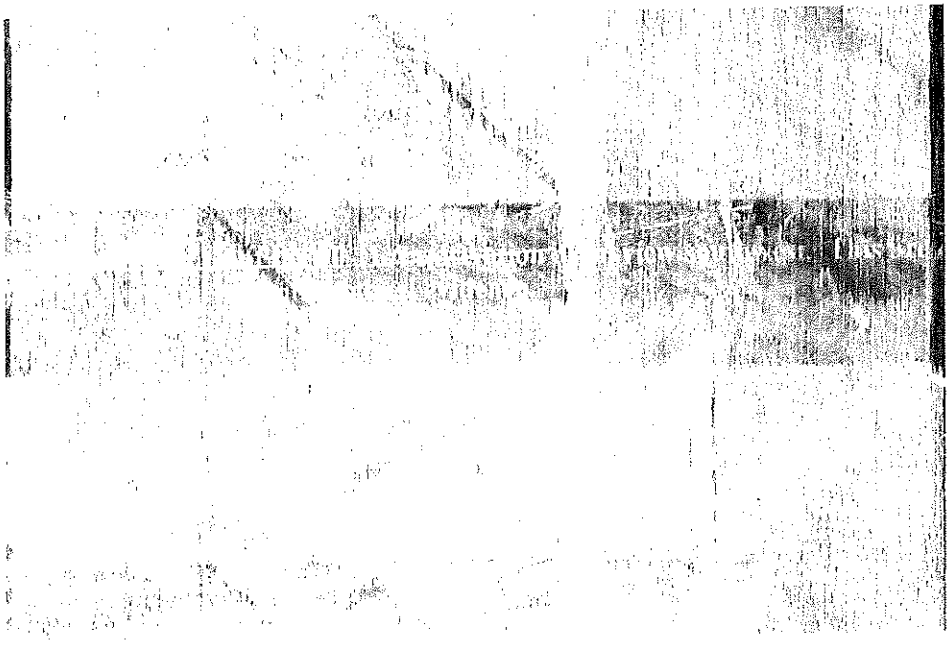

Figure 12 [illegible] **excavated**

CONCLUSIONS AND RECOMMENDATIONS

Witness statements and materials turned over to U.S. personnel in 1991 and 1992 exclusively correlated this crash location with the RSONO 1974 incident. During 10-1LA RT2 excavated a total of 425 square meters surrounding the reported impact crater and areas to the west where a 14-x-16 m, low density concentration of possible life-support materials, possible material evidence, and possible human remains was observed, recorded, and recovered. All retained evidence was returned to the JPAC-CIL for further analysis. In 1992 approximately 292 square meters were excavated. The two recovery projects excavated a combined area encompassing 720 square meters.

Evidence of the 1992 excavations was not visible on the surface. However, excavations completed during 10-1LA in the area believed to be the 1992 excavation based on the Detailed Report of Recovery revealed the presence of unconsolidated sediments, areas of mixed clay overburden from scarping, and the absence of the top sediment layer visible in other areas of the site. Limited amounts of life support materials recovered from the areas interpreted as previously excavated were sufficiently small to pass through one-quarter inch screens and were not considered to have sufficient locational integrity within the site to warrant additional excavations to the east.

Excavations completed in 2009 were of sufficient size to recover materials from what is in all probability the primary concentration of life support within the site. Evidence for post-event aerial bombing at this location indicates that the site has been significantly altered. The remaining area of aircraft debris has minimal to no potential to yield additional relevant evidence. Consequently, the CIL closed the site on 14 November 2009 and recommended no further excavation at this location.

GREGORY L. FOX, PhD
Recovery Leader/Anthropologist

EXECUTIVE SUMMARY

Subject: Life Sciences Equipment Findings for Artifacts of JTF-FA REFNO Case 1374.

Summary:

1. Based upon information provided to the Life Sciences Equipment Laboratory, Case REFNO 1374 pertains to the loss of a U.S. Air Force F-100D (# 56-3562) aircraft on 08 February 1968 in Laos, which left one crewmember unaccounted for.

2. Following receipt, and in processing of Case 1374 artifacts by the Life Sciences Artifact Section on 28 May 1996, a very extensive series of equipment studies and research, involving various agencies and the tracking of certain personnel, was undertaken commencing on 01 August 2001.

3. Artifact analysis concluded that the recovered artifacts potentially support an association with the loss of a U.S. Air Force aircraft, with the indicated presence of one individual at the recovery site.

4. Artifact evidence also potentially supports the involvement and loss of a U.S. Air Force F-100 series aircraft, during the cited JTF-FA Case REFNO 1374 time period.

5. Based upon the identified presence of equipment artifacts, as exemplified by escape system component and flight apparel items, no alternative escape methods (such as a manual bailout sequence) were evidenced as having been successfully accomplished.

6. Accordingly, the levels of fragmentation, general condition, and thermal involvement observed on various artifacts support that the life science equipment had been in a donned and cockpit installed state at the time of aircraft crash impact, with prevailing force levels then evidenced as being representative of a non-survivable nature, that would have culminated in the immediate demise of the involved crewmembers.

7. In Summation: Artifact evidence potentially supports the involvement of a U.S. Air Force F-100 series aircraft, with one individual on board at the time of terrain impact. The artifact evidence also supports a potential time period correlation with Case REFNO 1374.

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